



SOMSO  
MODELLE  
SINCE 1876



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# SOMSO MODELLE

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## Nature is Our Model

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MARCUS SOMMER • SOMSO MODELLE

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## The catalogue

In this catalogue you will find a specific selection of our original SOMSO Models. You will find further SOMSO Models in Internet under [www.somso.de](http://www.somso.de).

By registering in our mailing list you will automatically receive information on our new publications and, moreover, get further information on new models as far as our SOMSO Models are concerned. Please would you register under [www.somso.de](http://www.somso.de) in Internet or ask one of our specialist dealers of your choice.

## SOMSO MODELS

### right on your door step

Our trading partners are selected companies providing a good service. You can get information about trading partners on your door step under the dealer search column on our Internet page [www.somso.de](http://www.somso.de) or by calling up our service line »0049« (0) 9561 85740 Mondays to Fridays 7 a.m. to 5 p.m. (European time).

## SOMSO-Service

Our trading partners will be only too pleased to be available to you and are already looking forward to getting to know you. No matter whether you are interested in just one single model or planning new projects, our service covers in detail:



consultancy and planning



spare parts acquisition



repair service in close co-operation with SOMSO

## Delivery and installation service

Once you have made your choice and have ordered one of our SOMSO Models from one of our trading partners, you can rest assured that everything will be delivered in good time and with the utmost of care. Our partners are dedicated to this philosophy and set highest demands on quality.

## SOMSO MODELS in Internet

You can see and get a clear impression of our SOMSO Models and our company philosophy under our address [www.somso.de](http://www.somso.de). These pages offer you an information platform about our anatomical, zoological and botanical SOMSO Models. Over and above this, you will find background information on our company, its history, news and press reports and dates and times when you will find us at fairs and exhibitions. We are already looking forward to your visit. Have fun when surfing!

## SOMSO - a full five-year guarantee

No other manufacturer in this field offers a full five-year warranty - on all models - that covers both durability and workmanship.

## Important Information:

1. SOMSO Modelle are protected by copyright. The copying of SOMSO Modelle is prohibited and protected by law.
2. Close co-operation with scientific institutions ensures that SOMSO Modelle are always developed according to state-of-the-art scientific knowledge.
3. SOMSO Modelle - since 1876 highly accurate teaching aids for schools and science - are made of durable and recyclable SOMSO-Plast except for models which are not suffixed with "S" at the end e.g. A 37 etc. which are produced in plaster, which is less durable.
4. Where finishes, measurements and weights have been changed this is due to technical or scientific improvements. SOMSO Modelle are delivered with a description key written in close co-operation with our scientific advisers.
5. Functional models help to explain physiological processes. All functional models are marked with (F) on our sites. Functional models are subject to wear dependent on the material from which they are made.
6. SOMSO Modelle are outstanding for their natural presentation, assembly and attention to detail.
7. SOMSO Modelle are predominantly handmade - only in Sonneberg and Coburg - by a highly qualified and skilled workforce.

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## CONTENTS

# ANATOMY

Muscle Figures	3
Torsomodelle	4-5
Digestive Organs	6
Anatomy of Skin and Hair	7
Nervous Systems	7-10
Eye	10
Ear	11
Teeth	12
Nose, Tongue and Larynx Genital organs, embryonic development, birth	13 14-15
Baby Care	15
Circulatory organs	16
Anthropological Skulls	17
Extremities and Joints	18-19
Artificial bone models	22-23
Artificial bone models - comparative Anatomy	24-25

# ZOOLOGY

Invertebrates	26-27
Development of Animals	28-29
Amphibians and reptiles of Central Europe	30-31
Vertebrates	32

# BOTANY

Fungi Models	33
Cryptogams	34
Monocotyledonous plants Fertilization and Germination - Gymnospermous plants	35
Dicotyledonous plants	36-37
Plant Cell, Plant morphology	38-39



**Educational competence**

Since over 125 years, SOMSO has produced original models aimed at the highest educational standards. Accurate in every detail and dimension makes a lifelike training and teaching possible.

**AS 1 ·  
MALE MUSCLE FIGURE**

about 1/2 natural size, in SOMSO-Plast. Separates altogether into 27 parts: cranium, brain (2), thoracic and abdominal wall, halves of the lung (2), heart (2), liver, stomach, duodenum, small and large intestine, right arm, left arm with four removable muscles, muscles of the leg (9), body. On a stand and base. Height: 86 cm. (figure 82 cm.), width: 49 cm., depth: 38 cm., weight: 7.2 kg.

**AS 3 ·  
MALE MUSCLE FIGURE**

about 1/4 natural size, in SOMSO-Plast. The model shows the topography of muscles and is not detachable. Removable from a base. Height: 53 cm. (figure 50 cm.), width 33 cm., depth: 15 cm., weight: 1.5 kg.



AS 3

AS 1



AS 12



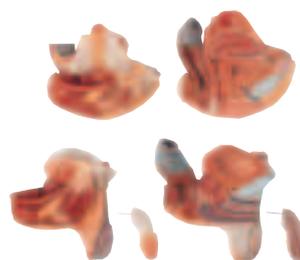
AS 4 VISCERA



AS 20/1



AS 4



AS 4 FEMALE AND MALE  
GENITAL ORGANS DISSECTED

**AS 4 · TORSO  
WITH HEAD AND INTER-  
CHANGEABLE MALE AND  
FEMALE GENITALIA**

Natural size, in SOMSO-  
Plast. Separates into 20 parts.  
On a base. Height: 92 cm.  
(torso 88 cm.), width: 40 cm.,  
deth: 26 cm., weight: 12.2 kg.

**AS 12 · TORSO OF YOUNG  
MAN WITHOUT HEAD**

Natural size, in SOMSO-  
Plast. Separates into 12 parts.  
On a base. Height: 71 cm.  
(torso 67 cm.), width: 39 cm.,  
depth: 26 cm., weight: 8.7 kg.

**AS 20/1 ·  
SMALL TORSO OF  
YOUNG MAN WITH HEAD**

About 1/2 natural size, in  
SOMSO-Plast. Separates  
into 11 parts. On a base.  
Height: 52 cm. (torso 49 cm.),  
width: 21 cm., depth: 18 cm.  
weight: 3.15 kg.

**AS 20/4 · SMALL  
TORSO OF YOUNG MAN  
WITHOUT HEAD**

About 1/3 natural size, in  
SOMSO-Plast. Separates into  
7 parts. Removable from  
base. Height: 28 cm. (torso  
26 cm.), width: 17.5 cm.,  
depth: 14 cm., weight: 1.7 kg.

**AS 20/5 B · SMALL  
TORSO OF YOUNG MAN  
WITH HEAD**

About 1/3 natural size, in  
SOMSO-Plast. Separates into  
9 parts. Removable from  
base. Height: 37 cm. (torso  
35 cm.), width: 17.5 cm.,  
depth: 14 cm., weight: 2 kg.



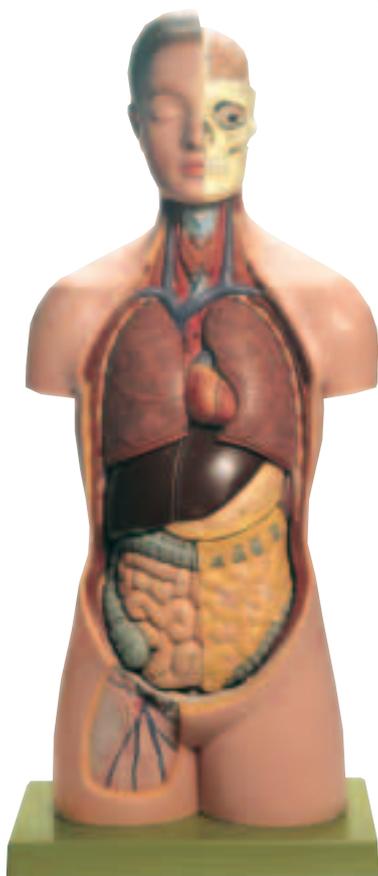
AS 20/5B

AS 20/4



*Hand assembly and finishing  
by German craftsmen*

*SOMSO Modelle are produced only in Sonneberg and Coburg – nowhere else – by highly qualified and skilled craftsmen. Some components are now machine-made, but all models are assembled and painted entirely by hand so that each is a unique work of art.*



AS 16

**AS 16 · TORSO OF YOUNG MAN WITH HEAD**

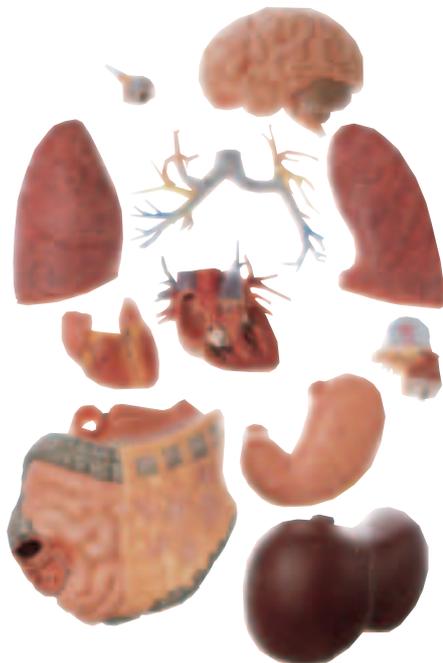
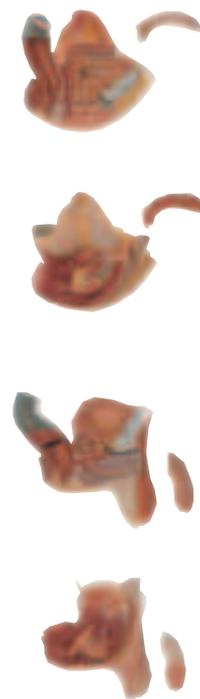
Natural size, in SOMSO-Plast. Separates into 12 parts. On a base. Height: 91 cm. (torso 87 cm.), width: 39 cm., depth: 26 cm., weight: 9 kg.

**AS 23/2 · TORSO WITH HEAD AND OPEN BACK**

Natural size, in SOMSO-Plast, one side with muscles and interchangeable female and male genital organs. Separates into 20 parts. On a base. Height: 90 cm., (torso 86 cm.), width: 39 cm., depth: 26 cm., weight: 11.2 kg.



AS 23/2



*Resistant plastic  
SOMSO-Plast*

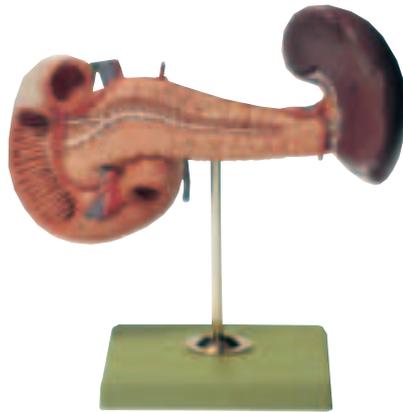
*SOMSO knows what is required of classroom models. Plastic and paints, which can withstand repeated separation and reassembly, are formulated to meet these requirements. The fact that many models are still in use after many years proves this.*



JS 4



JS 8



JS 11

**JS 2/2 ·  
DIGESTIVE TRACT**

Natural size, relief model, in SOMSO-Plast. Separates into 3 parts, the half section of the stomach can be opened. On a base plate. Height: 91 cm., width: 32 cm., depth: 12 cm., weight: 5 kg.

**JS 4 · STOMACH**

Natural size, in SOMSO-Plast. Separates into 2 parts, on a stand with base. Height: 34 cm., width: 19 cm., depth: 18 cm., weight: 800 g.

**JS 8 · LIVER  
AND GALL BLADDER**

Enlarged approx. 1 1/2 times, in SOMSO-Plast. In one piece. On a stand with base. Height: 29 cm., width: 26 cm., depth: 19 cm., weight: 900 g.

**JS 11 · PANCREAS  
WITH SPLEEN AND  
DUODENUM**

Natural size, in SOMSO-Plast. In one piece. On a stand with base. Height: 23 cm., width: 22 cm., depth: 12 cm., weight: 300 g.

**LS 9 · KIDNEY,  
NEPHRON AND  
GLOMERULUS**

Model combination on a base plate. In one piece. In SOMSO-Plast. Height: 30 cm., width: 65 cm., depth: 9 cm., weight: 3 kg.



JS 2/2



LS 9



**SOMSO Modelle  
in science**

*In many fields of university education SOMSO Modelle are used. The range includes models which are conceived with regard to their size and their information especially for the lecture-hall. Eminent professors take part in the continuous development and improvement of SOMSO Modelle for the lecture-hall.*



**KS 2**

**KS 1 ·  
SECTION OF SKIN**

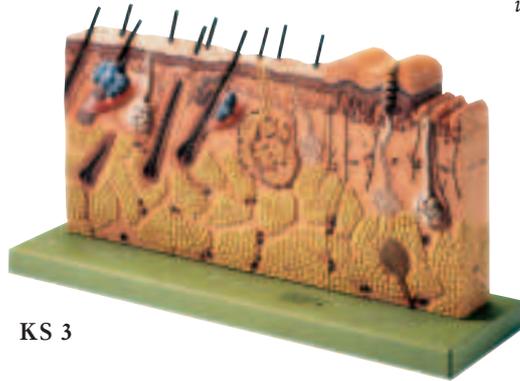
Enlarged approx. 70 times, in SOMSO-Plast. The layers of skin can be removed. Separates into 4 parts. Mounted on base. Height: 27 cm., width: 33 cm., depth: 15 cm., weight: 1.8 kg.

**KS 2 ·  
SECTION OF SKIN**

Enlarged approx. 70 times, in SOMSO-Plast. In one piece. Mounted on board. Height: 25 cm., width: 35 cm., depth: 5 cm., weight: 1.1 kg.

**KS 3 ·  
BLOCK MODEL OF  
SECTION OF SKIN**

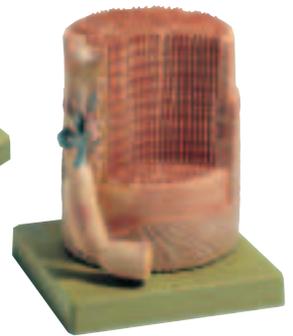
Enlarged approx. 70 times, in SOMSO-Plast. Showing the following a) scalp with hair, b) axilla, c) the hairless skin of the sole of the foot. In one piece. On a base. Height: 25 cm., width: 47 cm., depth: 15 cm., weight: 2.2 kg.



**KS 3**



**BS 5**



**BS 36**

**BS 5 · BASE OF THE HEAD**

With removable brain with arteries, natural size, in SOMSO-Plast. The brain separates into 8 parts. Altogether in 9 parts. On a base. Height: 22 cm., width: 18 cm., depth: 20 cm., weight: 1.5 kg.

**BS 6/1 · MEDIAN  
SECTION OF THE HEAD**

Natural size, in SOMSO-Plast. Not detachable. On a board. Height: 32 cm., width: 23 cm., depth: 4 cm., weight: 1.3 kg.

**BS 20 · BRAIN**

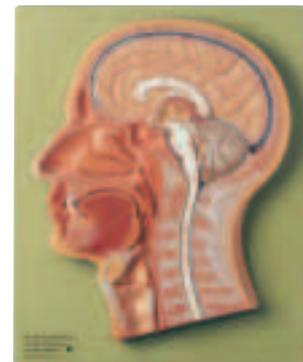
Natural cast, in SOMSO-Plast. Separates into 8 parts: frontal and parietal lobes (2), temporal and occipital lobes (2), medulla (2), cerebellum (2). On a base. Height: 15 cm., width: 16 cm., depth: 17 cm., weight: 1.1 kg.



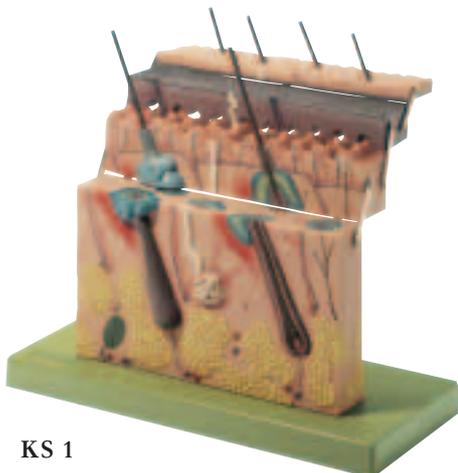
**BS 20**

**BS 36 · TRANSVERSELY  
STRIATED MUSCULAR  
FIBRE WITH MOTOR  
END-PLATE**

Enlarged approx. 4000 times, in SOMSO-Plast. Modelled from recent electron-microscopy. In one piece. Mounted on base. Height: 20 cm., width: 18 cm., depth: 18 cm., weight: 1 kg.



**BS 6/1**



**KS 1**

### BS 9 · HALF OF THE HEAD

Natural size, in SOMSO-Plast. On a stand with base. In one piece. Height: 41 cm., width: 18 cm., depth: 22 cm., weight: 1.3 kg.

### BS 21 · BRAIN

Natural cast, in SOMSO-Plast. Two parts, median section. On a base. Height: 15 cm., width: 16 cm., depth: 17 cm., weight: 800 g.

### BS 22 · BRAIN

Natural cast, in SOMSO-Plast. Median section. Altogether detachable into 4 parts. On a base. Height: 15 cm., width: 15 cm., depth: 17 cm., weight: 1.1 kg.



BS 25



BS 25/T



BS 25/1



BS 25/1

### BS 25 · MODEL OF BRAIN IN 15 PARTS

Natural size, in SOMSO-Plast, after Prof. Dr. J. W. Rohen, Anatomical Institute of the University Erlangen. Separates altogether into 15 parts. Base of the skull as base. Height: 23 cm., width: 15 cm., depth: 18 cm., weight: 1.8 kg.

### BS 25/1 · MODEL OF BRAIN WITH INDICATED CYTOARCHITECTURAL AREAS

Natural size, in SOMSO-Plast. After Prof. Dr. Dr. J. W. Rohen, Department of Anatomy of the University Erlangen. The model separates into 15 parts. Base of the skull as base. Height: 23 cm., width: 15 cm., depth: 18 cm., weight: 1.8 kg.

### BS 25/T · TRANSPARENT BRAIN MODEL

Natural size, in SOMSO-Plast. After Prof. Dr. Dr. J. W. Rohen, Department of Anatomy of the University Erlangen. The model separates into 15 parts. Mounted on stand with base. Height 30 cm., width 18 cm., length 20 cm., weight 1.1 kg.

### BS 26/1 · SYMPATHETIC NERVOUS SYSTEM

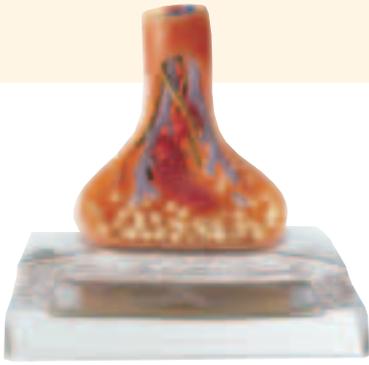
About 2/3 of the natural size, in SOMSO-Plast. Relief presentation of the right side of the body in particular the thoracic part, the cardiac plexus, and the pelvic plexus. In one piece. On a base plate. Height: 74 cm., width: 25.5 cm., depth: 10 cm., weight: 4.3 kg.

### BS 35 · NEURON

Enlarged approx. 2500 times, in SOMSO-Plast. Consisting of nerve cell body and medullated nerve fibre. In electron microscopic enlargement. Separates altogether into 3 parts. Removable from base. Height: 22 cm., width: 53 cm., depth: 17 cm., weight: 2.2 kg.

### BS 35/3 · MODEL OF A SYNAPSE

Many times enlarged, in SOMSO-Plast. After Studiendirektor Christian Groß. Neuro-tubules, neuro-filaments, synaptic vesicles and the postsynaptic apparatus with membrane structure. In one piece, on a base. Height: 21 cm., width: 22 cm., depth: 22 cm., weight: 900 g.



BS 35/3



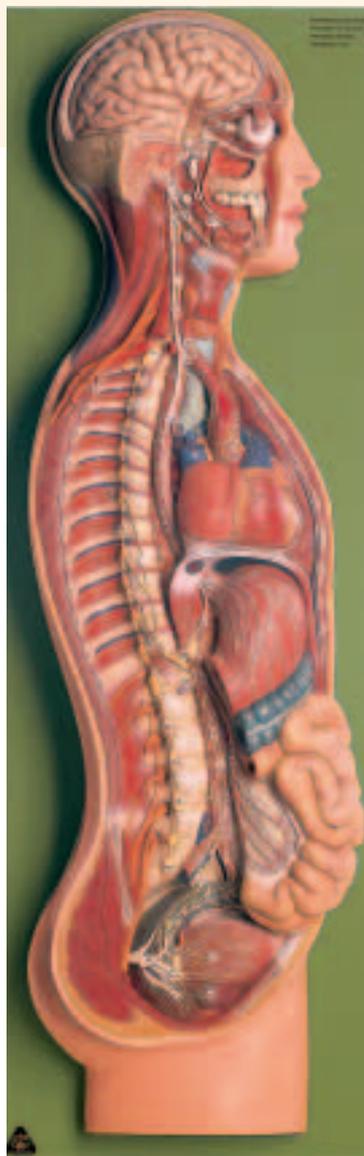
BS 21



BS 22



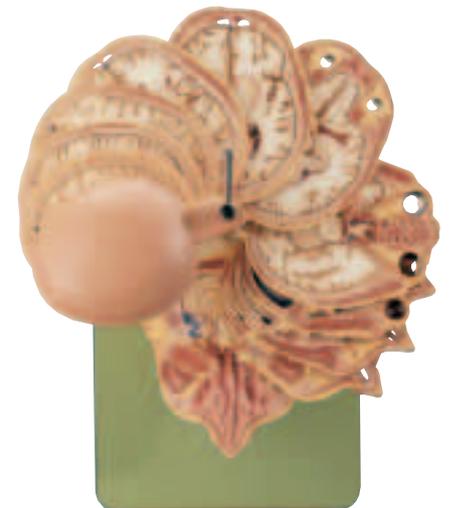
BS 35



BS 26/1

**BS 5/5 · ANATOMICAL SECTIONAL MODEL OF THE HEAD (COMBINED WITH CORRESPONDING MR-FIGURES)**

According to Prof. Dr. Dr. J. W. Rohen. The model shows the anatomical structures of 10 consecutive horizontal sections through the human head oriented to the plane usual in CT and MR imaging (CA-CP plane) and which have the same section thickness (0.8 cm). The sections were modelled on original preparations and are illustrated from above. Each cross section is turnable and removable. Natural size in special plastic. With explanatory booklet on the base. Height: 34 cm., width: 46 cm., depth: 30 cm., weight: 6.2 kg.



BS 5/5 top view



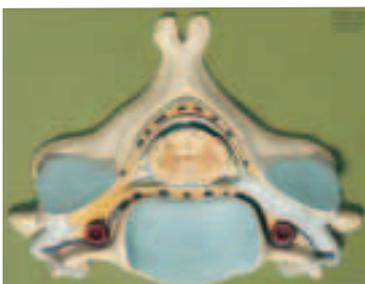
BS 9



BS 27



BS 32/37



BS 30

**BS 27 · NERVOUS SYSTEM**

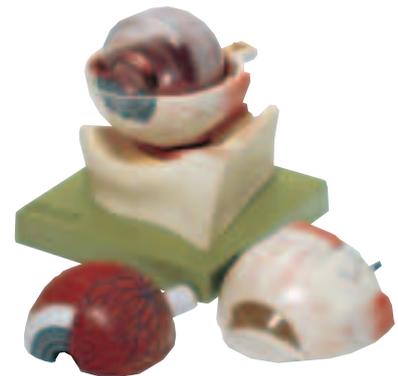
Relief model, about 1/2 of the natural size, in SOMSO-Plast. Schematic presentation of the central and peripheral nervous system. In one piece, on a base plate.  
Height: 91 cm., width: 32 cm., depth: 6 cm., weight: 5.5 kg.

**BS 30 · FIFTH CERVICAL VERTEBRA**

Enlarged approx. 7 times, in SOMSO-Plast. In one piece, mounted on board.  
Height: 28 cm., width: 40 cm., depth: 10 cm., weight: 1.6 kg.

**BS 32/37 · SPINAL CORD WITH NERVE BRANCHES**

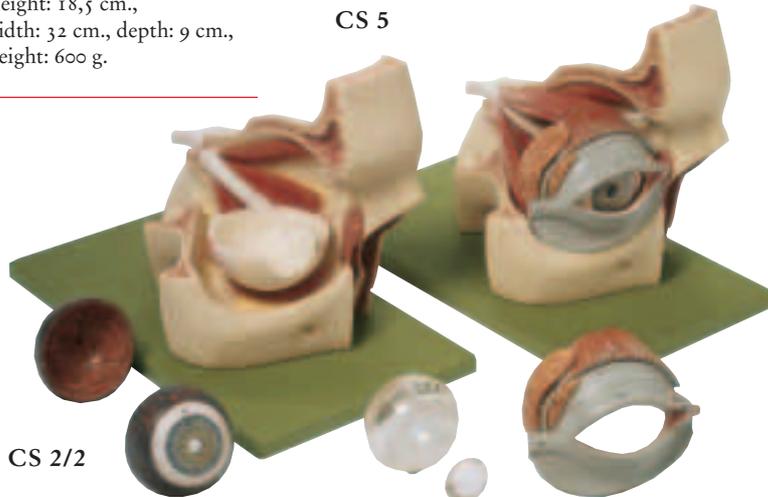
Enlarged approx. 5 times. The section through the spinal cord is enlarged approx. 10 times. In one piece. In a transparent case and mounted on board. In SOMSO-Plast.  
Height: 18,5 cm., width: 32 cm., depth: 9 cm., weight: 600 g.



CS 1



CS 5



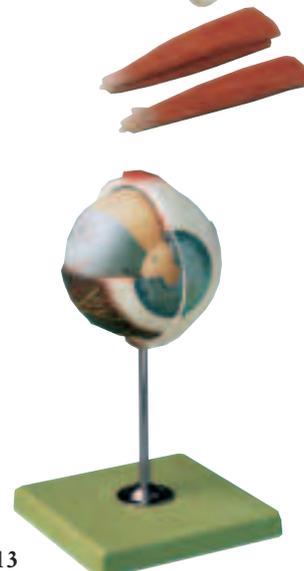
CS 2/2

**CS 1 · EYEBALL**

Enlarged approx. 5 times, in SOMSO-Plast. Separates into 7 parts. On a base.  
Height: 21 cm., width: 18 cm., depth: 18 cm., weight: 1.2 kg.

**CS 2/2 · EYEBALL WITH PART OF ORBIT**

Enlarged approx. 3 times, in SOMSO-Plast. Separates into 9 parts. On a base.  
Height: 21 cm., width: 20 cm., depth: 32 cm., weight: 1.4 kg.



CS 13

**CS 5 · EYEBALL**

Enlarged approx. 4 times, in SOMSO-Plast. Separates into 6 parts: sclerotic membrane (2), choroid membrane (2), vitreous humour, lens.  
On a base. Height: 18 cm., width: 12 cm., depth: 12 cm., weight: 400 g.

**CS 13 · EYEBALL**

Enlarged approx. 4 times, in SOMSO-Plast. On a stand with base. Height: 21 cm., width: 12 cm., depth: 12 cm., weight: 200 g.

**DS 3 · EAR**

Enlarged approx. 3 times, in SOMSO-Plast. Tympanic membrane with malleus, incus and labyrinth with stapes can be removed. Altogether 3 parts. On a base, with explanation. Height: 21 cm., width: 32 cm., depth: 19 cm., weight: 1.2 kg.

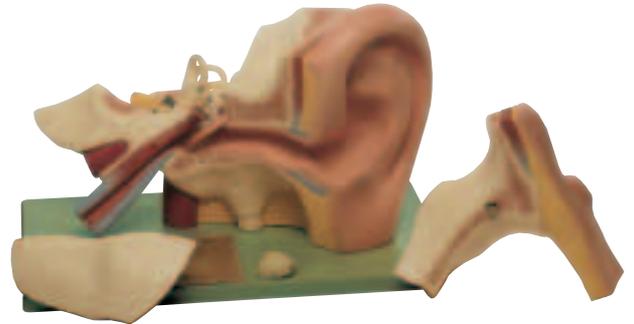


**DS 5 · EAR**

Enlarged approx. 3 times, in SOMSO-Plast. Altogether 6 parts. On a base. Height: 21 cm., width: 32 cm., depth: 19 cm., weight: 1.5 kg.



The inner ear of DS 5 dismantled



DS 5

**DS 10 · SECTION THROUGH THE CENTRAL SPIRAL OF THE COCHLEA**

Enlarged approx. 350 times, in SOMSO-Plast. In one piece. On a base plate. Height: 51 cm., width: 48 cm., depth: 5 cm., weight: 3.8 kg.

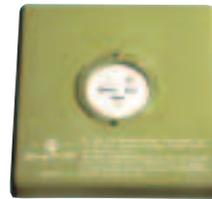
DS 13



DS 10

**DS 13 · LABYRINTH**

Enlarged approx. 18 times, in SOMSO-Plast. Altogether in 2 parts. On a stand with base. Height: 33 cm., width: 24 cm., depth: 18 cm., weight: 800 g.



QS 69

**QS 69 · THE THREE AUDITORY OSSICLES**

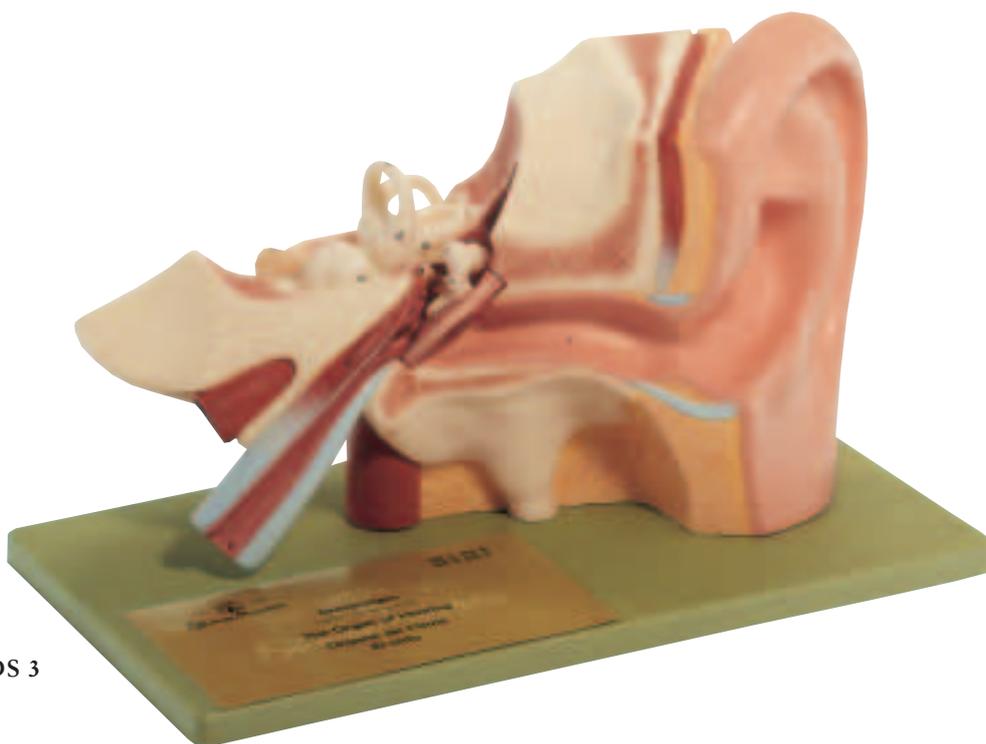
Cast from natural specimen, in SOMSO-Plast. Malleus, incus and stapes mounted under "Plexiglas" cover, removable. On a base plate. Height: 3 cm., width: 12 cm., depth: 12 cm., weight: 80 g.

**QS 70/1 · THE THREE AUDITORY OSSICLES WITH THE LABYRINTH**

Cast from natural specimen, in SOMSO-Plast. Mounted under "Plexiglas" cover, removable. On a base plate. Height: 3 cm., width: 12 cm., depth: 12 cm., weight: 80 g.



QS 70/1



DS 3



ES 4/1



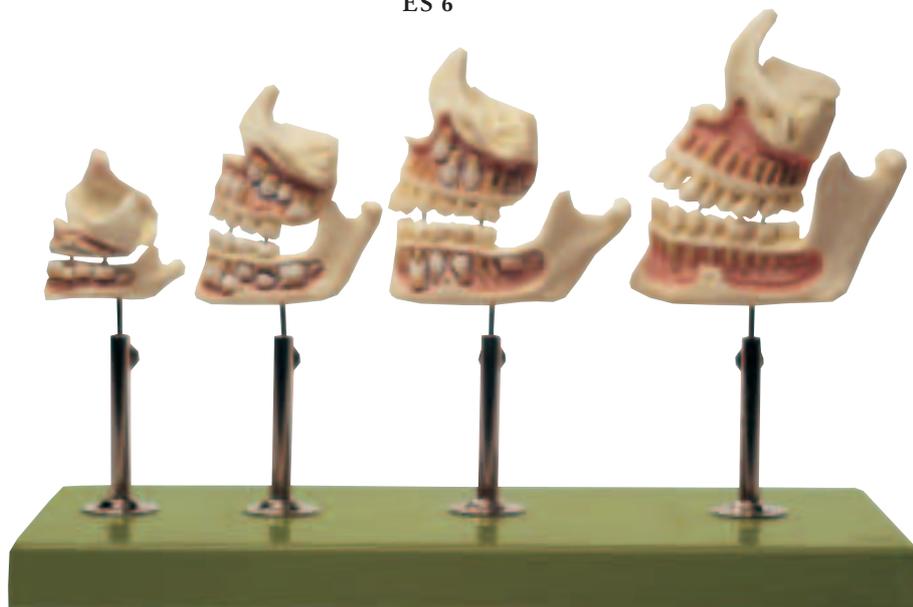
ES 8



ES 22



ES 6



ES 14

**ES 4/1 · LOWER JAW OF AN 18-YEAR-OLD**

Enlarged approx. 3 times, in SOMSO-Plast. Separates into 6 parts, on a stand with base. Height: 34 cm., width: 34 cm., depth: 18 cm., weight: 1.6 kg.

**ES 6 · CASE OF TEETH "KEEP YOUR TEETH HEALTHY"**

Teeth in natural size, and shown enlarged in parts, in SOMSO-Plast. Both healthy and decayed teeth are shown in 12 models. In one piece, under removable transparent cover. Height: 26 cm., width: 32 cm., depth: 4 cm., weight: 800 g.

**ES 8 · MOLAR TOOTH WITH CARIES**

Enlarged approx. 8 times, in SOMSO-Plast. Separates into 3 parts. On stand with base. Height: 24 cm., width: 12 cm., depth: 12 cm., weight: 400 g.

**ES 14 · DEVELOPMENT OF A SET OF TEETH**

Natural size, in SOMSO-Plast. In one piece. On stand with base. Height: 24 cm., width: 33 cm., depth: 11 cm., weight: 700 g.

**ES 22 · MODEL OF A SET OF TEETH**

Enlarged approx. 3 times, with large toothbrush to demonstrate how to brush one's teeth, in SOMSO-Plast. Without stand and base. From an original of the Bundeszentrale fuer gesundheitliche Aufklaerung in Cologne. Height: 14 cm., width: 19 cm., depth: 25 cm., weight: 1.3 kg.

**GS 4 · LARYNX WITH TONGUE**

Natural size, in SOMSO-Plast. Separates altogether into 5 parts. On a base. Height: 21 cm., width: 12 cm., depth: 15 cm., weight: 500 g.



GS 4/2



Ⓕ



FS 4

**FS 4 ·  
MEDIAN SECTION OF  
THE CAVITIES OF NOSE,  
MOUTH AND THROAT**

Enlarged approx. 2 times,  
in SOMSO-Plast. Separates  
into 2 parts, on a base  
plate. Height: 40 cm.,  
width: 28 cm., depth: 9 cm.,  
weight: 1.6 kg.

**GS 4/2 ·  
LARYNX WITH TRACHEA**

Natural size, in SOMSO-  
Plast. On a stand with base.  
Separates into 2 parts: Height:  
39 cm., width: 20 cm., depth:  
18 cm., weight: 700 g.

**GS 6 · CARTILAGES  
OF THE LARYNX**

Functional model, enlarged  
approx. 2.5 times, in  
SOMSO-Plast. Arytenoid  
cartilage, vocal folds and  
epiglottis can be moved. On  
a base. In one piece. Height:  
28 cm., width: 12 cm., depth:  
14 cm., weight: 700 g.



GS 6



GS 10



Ⓕ

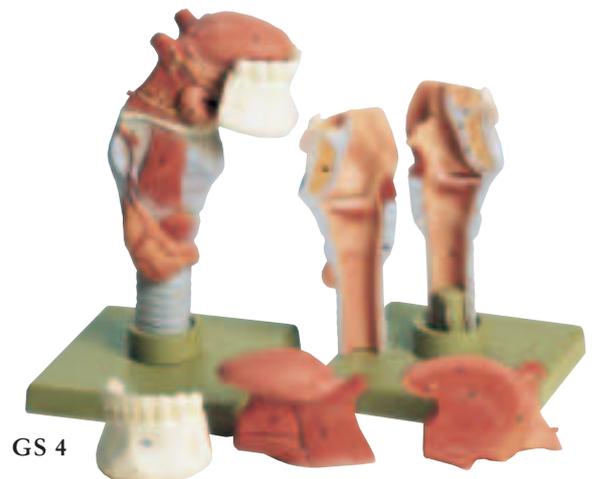
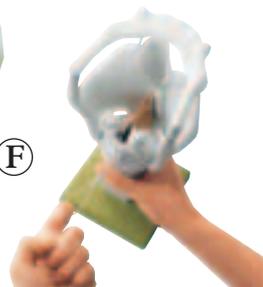


**GS 10 · FUNCTIONAL  
MODEL OF THE LARYNX**

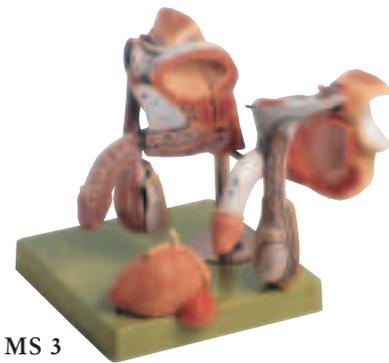
Enlarged approx. 3 times, in  
SOMSO-Plast. The opening  
and closing of the true glottis,  
the variation of tension of the  
vocal fold and the passage of  
air can be demonstrated very  
instructively. In one piece.  
On a base. Height: 33 cm.,  
width: 18 cm., depth: 18 cm.,  
weight: 1.5 kg.



Ⓕ



GS 4



MS 3

**MS 1 · MEDIAN SECTION OF THE FEMALE PELVIS**

Natural size, in SOMSO-Plast. Separates into 2 parts. On a board. Height: 33 cm., width: 27 cm., depth: 12 cm., weight: 1.5 kg.

**MS 2 · MEDIAN SECTION OF THE MALE PELVIS**

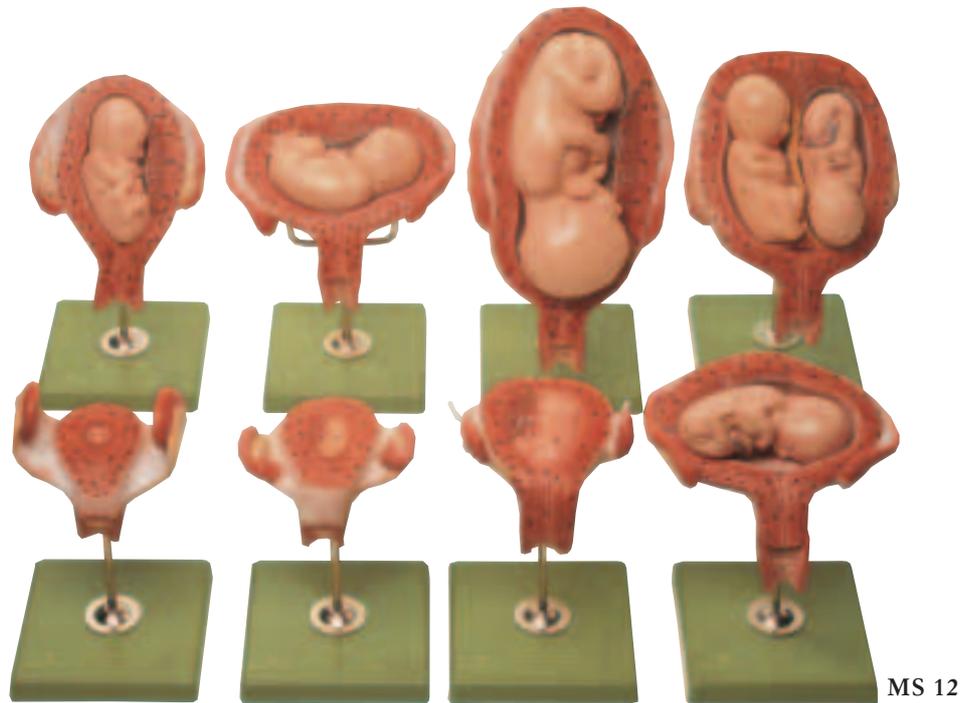
Natural size, in SOMSO-Plast. Altogether 4 parts. On a board. Height: 33 cm., width: 27 cm., depth: 14 cm., weight: 1.3 kg.

**MS 3 · MALE GENITAL ORGANS**

Natural size, in SOMSO-Plast. Separates altogether into 5 parts. On a stand with base. Height: 21 cm., width: 18 cm., depth: 20 cm., weight: 1.2 kg.



MS 5



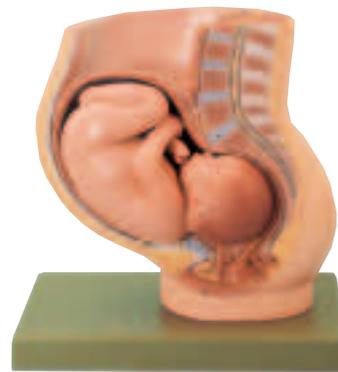
MS 12

**MS 5 · FEMALE GENITAL ORGANS**

Natural size, in SOMSO-Plast. Separates into 4 parts. On a stand with base. Height: 26 cm., width: 18 cm., depth: 19 cm., weight: 900 g.

**MS 11 · EMBRYO**

Enlarged approx. 25 times, in SOMSO-Plast. The model shows an embryo, approximately 4 weeks old. In one piece. On a stand with base. Height: 25 cm., width: 12 cm., depth: 12 cm., weight: 300 g.



MS 13



MS 16

**MS 12 · SERIES SHOWING PREGNANCY**

Natural size, in SOMSO-Plast. Eight models showing the uterus with embryo and fetus from the first to the seventh month of pregnancy. Each model individually mounted on a stand and base. Altogether in 14 parts. Weight of the series: 3.5 kg.

**MS 13 · PELVIS WITH UTERUS IN NINTH MONTH OF PREGNANCY**

Natural size, in SOMSO-Plast. The model shows the right half of the female pelvis in median section. Fetus removable. Altogether 2 parts. On a base. Height: 41 cm., width: 39 cm., depth: 29 cm., weight: 4.9 kg.



MS 15



*Baby-care instruction with SOMSO nursing babies*

*Teaching baby, newborn baby, nursing baby*

- 1: Size and weight comensurate with age*
- 2: Natural body and head mobility*
- 3: Hand-painted eyes and hair*
- 4: Robust joints*
- 5: Water-proof finish*
- 6: 5-year warranty*

**MS 15 · FERTILIZATION AND DEVELOPMENT OF THE HUMAN OVUM UP TO THE 3RD MONTH**

Shown by 16 different models, in SOMSO-Plast. Collection in a show-case with removable "Plexiglas" cover. Height: 49 cm., width: 57 cm., depth: 11 cm., weight: 5.7 kg.

**MS 16 · FETAL CIRCULATORY SYSTEM**

Natural size, in SOMSO-Plast. Separates into 2 parts. On a base board. Height: 48 cm., width: 30 cm., depth: 14 cm., weight: 2.8 kg.

**MS 33/E · DOLL FOR BABY CARE**

In SOMSO-Plast. Undressed. Size of the head: 36 cm., length: 49 cm., weight: 3 kg.

**MS 51 · RELIEF MODEL OF THE OVARY**

Enlarged approx. 10 times, in SOMSO-Plast. In one piece. Mounted on board. Height: 28 cm., width: 40 cm., depth: 8 cm., weight: 1.8 kg.

**MS 52 · NURSING BABY, FEMALE**

Corresponding approx. to the size and weight of a 6-week-old baby. In SOMSO-Plast. Size of the head 35.8 cm., length: 54 cm., weight: 3.3 kg.

**MS 53/B · NURSING BABY, MALE**

Corresponding approx. to the size and weight of a 6-week-old baby, black in color. In SOMSO-Plast. Size of the head 35.8 cm., length: 54 cm., weight: 3.3 kg.

**MS 58 · Newborn Baby, Male**

In soft SOMSO-Plast. Size of the head: 34 cm., length: 46 cm., weight: 2.2 kg.

**MS 59 · Newborn Baby, Female**

In soft SOMSO-Plast. Size of the head: 34 cm., length: 46 cm., weight: 2.2 kg.



MS 52



MS 58



MS 53/B



MS 33/E



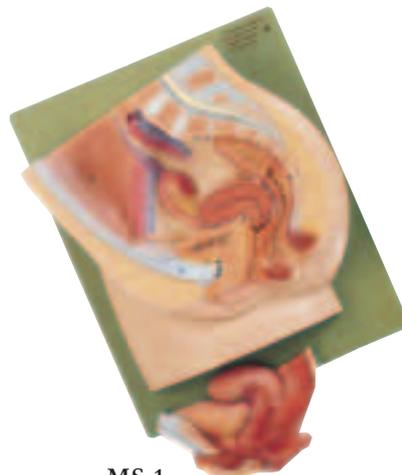
MS 59



MS 51



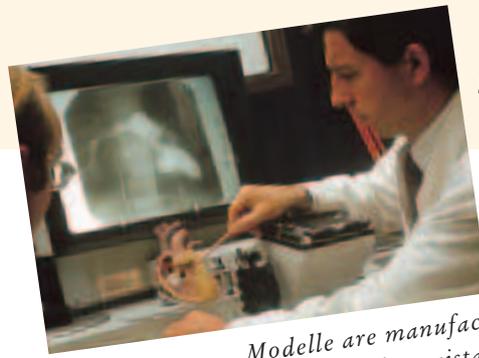
MS 11



MS 1

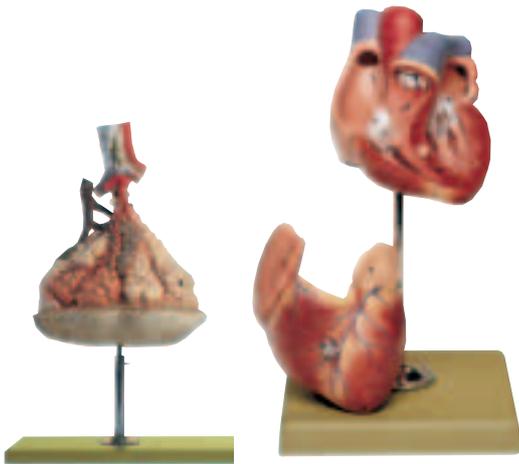


MS 2



**SOMSO Modelle  
in Medical Schools**

*The education of new medical students sets Universities tasks which can be solved in part by SOMSO Modelle. SOMSO Modelle are manufactured for many disciplines offering valuable assistance in lessons. The functional models cover special areas and allow, in part, realistic movement. The medical teaching profession chooses SOMSO Modelle for their lifelike representation and handling and their scientific accuracy.*

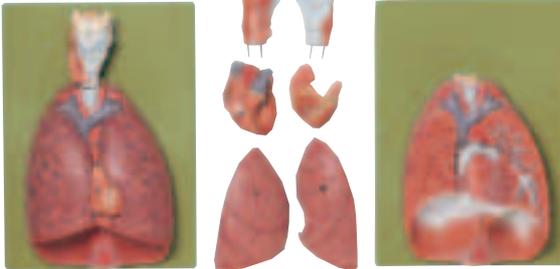


HS 23/1

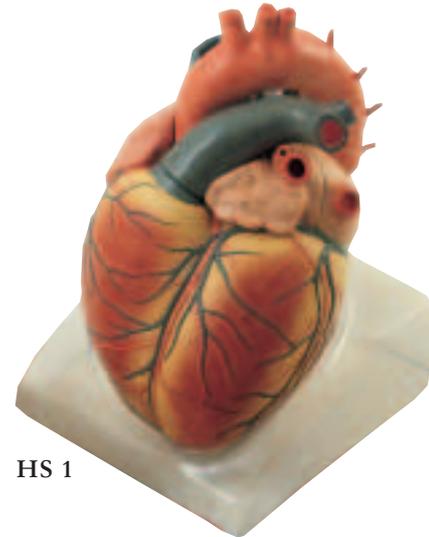
HS 3



HS 20/1



HS 7



HS 1



HS 10

### HS 1 · HEART

Enlarged approx. twice, in SOMSO-Plast. Separates into 3 parts. On a transparent base. Height: 33 cm., width: 24 cm., depth: 26 cm., weight: 2.8 kg.

### HS 3 · HEART

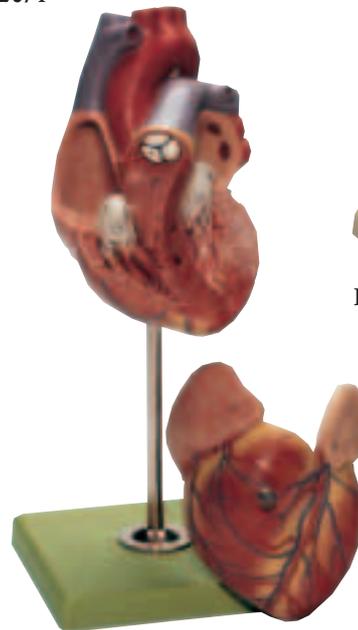
About 3/4 natural size, in SOMSO-Plast. With a stand and base. Separates into 2 parts. Height: 22 cm., width: 13 cm., depth: 12 cm., weight: 400 g.

### HS 4 · HEART

Natural size, in SOMSO-Plast. Separates into 2 parts. On a stand with base. Height: 27 cm., width: 12 cm., depth: 14 cm., weight: 600 g.

### HS 5 · HEART

Approximately twice natural size, in SOMSO-Plast. Separates into 4 parts. On a stand with base. Height: 32 cm., width: 18 cm., depth: 19 cm., weight: 1 kg.



HS 4



HS 5

### HS 7 · LUNGS WITH HEART, DIAPHRAGM AND LARYNX

About 3/4 natural size, in SOMSO-Plast. Separates into 7 parts. Mounted on board. Height: 39 cm., width: 28 cm., depth: 12 cm., weight: 2.3 kg.

### HS 10 · CIRCULATORY SYSTEM

Relief model, 1/2 natural size, in SOMSO-Plast. General view of the network of vessels of the body. In one piece. On a base plate. Height: 91 cm., width: 32 cm., depth: 7 cm., weight: 4.7 kg.

### HS 20/1 · RED BLOOD-CORPUSCLE

Enlarged approx. 11.000 times, in SOMSO-Plast. In one piece. Weight 80 g.

### HS 23/1 · LOBULE OF THE LUNG

Enlarged approx. 150 times, in SOMSO-Plast. In one piece. On a stand with base. Height: 43 cm., width: 23 cm., depth: 18 cm., weight: 1.4 kg.

### S 1 · RECONSTRUCTION OF THE SKULL OF PARANTHROPUS BOISEI

Site/date of finding: Olduvai Gorge (Tanzania, East Africa), 1959. Stratum of finding: bottom bed I Olduvai. Age: Lower Pleistocene, approx. 1.7 million years. Detachable in 2 parts. W.: 765 g.

### S 2 · RECONSTRUCTION OF THE SKULL OF HOMO ERECTUS

Site/date of finding: Sangiran (Central Java), 1936 and 1939. Stratum of finding: Djertis formation. Age: Upper Pliocene, less than 1.9 million years. Detachable in 2 parts. W.: 820 g.

### S 2/3733 · RECONSTRUCTION OF THE SKULL OF HOMO ERGASTER (KNM-ER 3733)

Site/date of finding: Koobi Fora, East Turkana Region, Kenya, East-Africa, 1975. Age: Upper Pliocene, approx. 1.8 million years. Detachable in 2 parts. W.: 640 g.

### S 5/1 · RECONSTRUCTION OF THE SKULL OF PROCONSUL AFRICANUS

Site/date of finding: Rusinga Island, Kenya, East-Africa, 1948. Age: approx. 20 million years (early Miocene). Detachable in 2 parts. W.: 200 g.



### S 2/F · RECONSTRUCTION OF THE FEMUR OF HOMO ERECTUS (TRINIL 3)

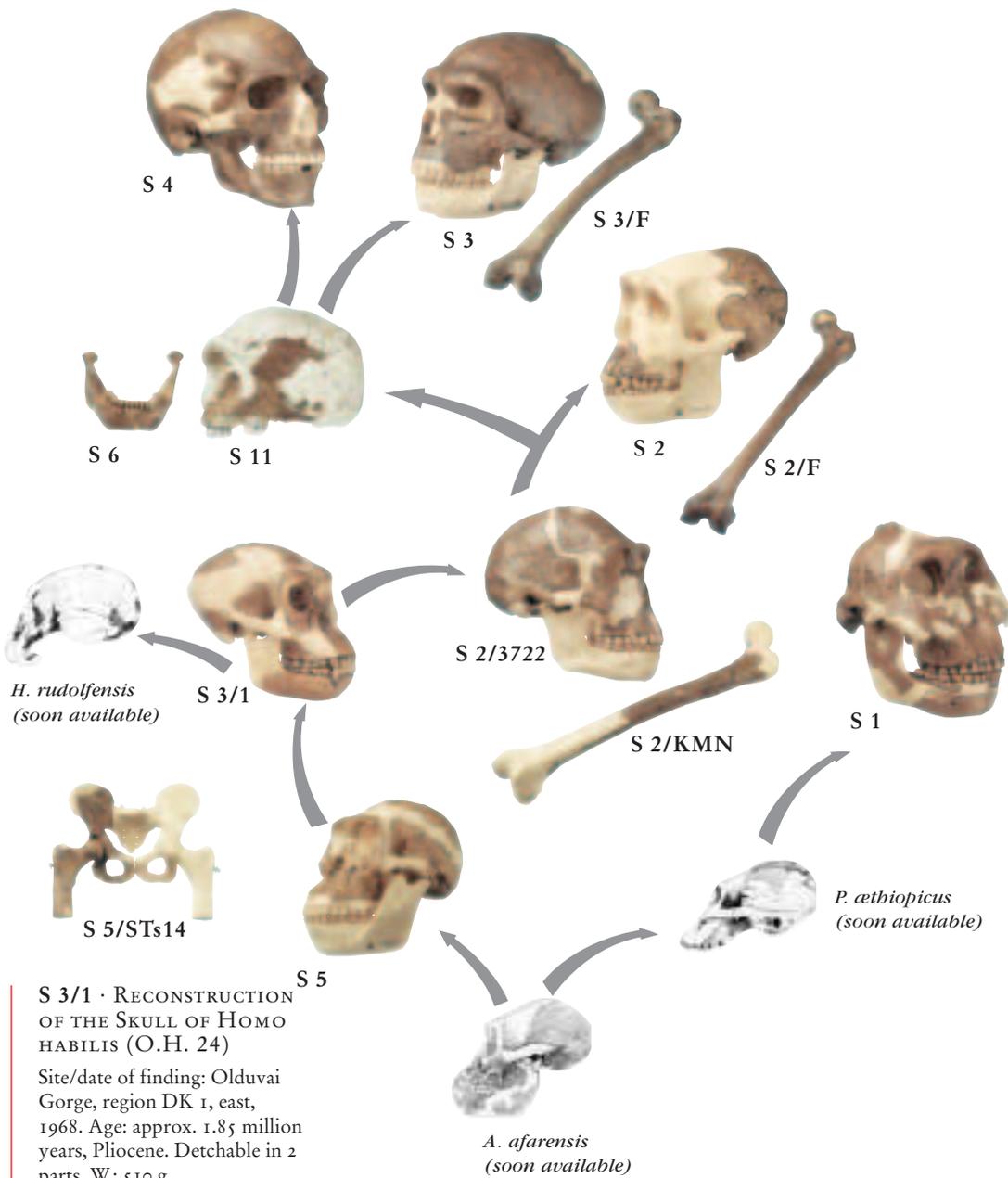
Site/date of finding: Trinil, Java, Indonesia, 1892. Age: lower Middle-Pleistocene, approx. 800.000 years. W.: 603 g.

### S 2/KNM · RECONSTRUCTION OF FEMUR OF HOMO ERGASTER

Site/date of finding: Koobi Fora, Kenya, East-Africa, 1971. Age: Middle Pleistocene, approx. 1.8 million years W.: 760 g.

### S 3 · RECONSTRUCTION OF THE SKULL OF HOMO NEANDERTHALENSIS

Site/date of finding: La Chapelle aux Saints (Dordogne France), 1908. Age: middle Upper Pleistocene (Wuerm glacial), approx. 40.000 - 70.000 years old. Separates into 2 parts. W.: 870 g.



### S 3/1 · RECONSTRUCTION OF THE SKULL OF HOMO HABILIS (O.H. 24)

Site/date of finding: Olduvai Gorge, region DK 1, east, 1968. Age: approx. 1.85 million years, Pliocene. Detachable in 2 parts. W.: 510 g.

### S 3/F · FEMUR OF HOMO NEANDERTHALENSIS

Site/date of finding: Feldhofer Cave, Neander Valley near Düsseldorf, 1856. Age: middle Upper Pleistocene (Würm Glacial), approx. 40 000 - 50 000 years old. W.: 640 g.

### S 4 · RECONSTRUCTION OF THE SKULL OF HOMO SAPIENS

As an example of the Cro-magnon man we have taken a skull from the series of findings from Predmost (Czech Republic). Site/date of finding: Predmost (North Moravia), 1884 - 1928. Age: Top upper Pleistocene, approx. 25.000 years. Separates into 2 parts. W.: 830 g.

### S 5 · RECONSTRUCTION OF THE SKULL OF AUSTRALOPITHECUS AFRICANUS

Site/date of finding: Sterkfontein (Transvaal, South-Africa), 1947. Stratum of finding: "member 4" (formerly: lower breccia). Age: lower pliocene, approx. 2.5 - 3.0 mill. years. Separates into 2 parts. W.: 570 g.

### S 5/STs14 · RECONSTRUCTION OF THE PELVIS OF AUSTRALOPITHECUS AFRICANUS

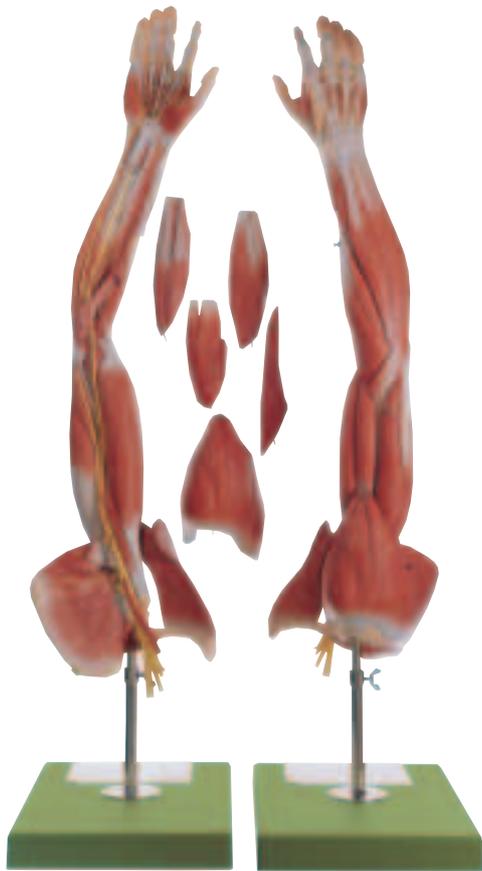
Site/date of finding: Sterkfontein, Republic of South Africa, 1947. Age: Upper Pliocene, approx. 2.5 - 3 million years. W.: 330 g.

### S 6 · LOWER JAW FROM MAUER NEAR HEIDELBERG, HOMO HEIDELBERGENSIS

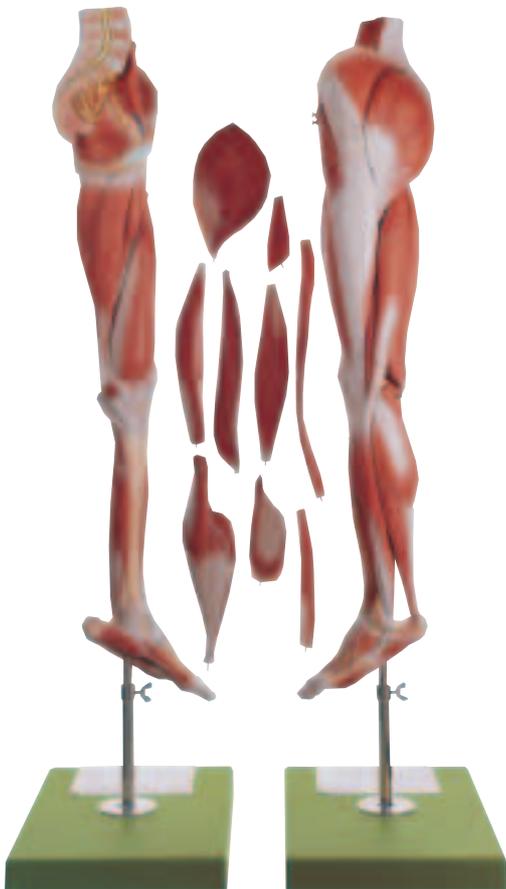
Site/date of find: Mauer (south-east of Heidelberg, Germany 1907. Age: Middle Pleistocene, approx. 500.000 - 600.000 years. W.: 600 g.

### S 11 · THE STEINHEIM SKULL. HOMO HEIDELBERGENSIS

Site/date of finding: Steinheim an der Murr, north of Stuttgart, 1933. Age: Middle-Pleistocene, Mindel-Riss or Holstein Interglacial Period, approx. 250.000 years. In one piece, W.: 470 g.



NS 15



NS 10

**NS 1 · NORMAL FOOT**  
Natural size, in SOMSO-Plast. In one piece. Height: 13 cm., width: 26 cm., depth: 10 cm., weight: 450 g.

**NS 2 · FLAT FOOT**  
Natural size, in SOMSO-Plast. In one piece. Height: 13 cm., width: 26 cm., depth: 9 cm., weight: 450 g.

**NS 3 · ARCHED FOOT**  
Natural size, in SOMSO-Plast. In one piece. Height: 16 cm., width: 24 cm., depth: 10 cm., weight: 450 g.

**NS 10 · MUSCLES OF THE LEG WITH BASE OF PELVIS**  
A little under natural size, in SOMSO-Plast. Separates altogether in 10 parts. Standing upright, revolving on a stand with base. Height: 108 cm., width: 39 cm., depth: 26 cm., weight: 5 kg.

**NS 15 · MUSCLES OF THE ARM WITH SHOULDER GIRDLE**  
Natural size, in SOMSO-Plast. Altogether in 6 parts. Standing upright and revolving on a stand with base. Height: 105 cm., width: 39 cm., depth: 26 cm., weight: 4.6 kg.

**NS 17 · SHOULDER JOINT**  
Natural size, in SOMSO-Plast. In one piece. On a stand with base. Height: 23 cm., width: 19 cm., depth: 19 cm., weight: 500 g.

**NS 18 · ELBOW JOINT**  
Natural size, in SOMSO-Plast. In one piece. On a base. Height: 21 cm., width: 13 cm., depth: 12 cm., weight: 200 g.

**NS 19 · KNEE JOINT**  
Natural size, in SOMSO-Plast. In one piece. On a base. Height: 24 cm., width: 12 cm., depth: 14 cm., weight: 300 g.

**NS 20 · HIP JOINT**  
Natural size, in SOMSO-Plast. In one piece. On a base. Height: 28 cm., width: 18 cm., depth: 18 cm., weight: 600 g.



NS 17



NS 18



NS 19



NS 20



NS 1



NS 43



NS 44



NS 45



NS 46



NS 47



NS 48



NS 2

## SOMSO functional models

The special features of the SOMSO functional models are the lifelike reproduction and the utilisation of an elastic plastic material of high quality with a long durability.

- The advantages of SOMSO functional models
1. Authentic reproduction of the articular anatomy
  2. Top quality, tough and durable flexible plastic for the ligaments
  3. Use of screw connections wherever possible
  4. Practical to handle by removable from the stand
  5. Key on base
  6. 5-year warranty



### NS 43 - NS 48

The sections of joint in SOMSO-Plast, documented in a series of models NS 43 - NS 48. Casts from natural bone sections with topography of muscles, ligaments, vessels and nerves. Each with explanation on the base plate. Under removable transparent cover.

#### NS 43 · SECTION THROUGH THE KNEE JOINT

Natural size, in SOMSO-Plast. Sagittal section. In one piece. Height: 26 cm., width: 32 cm., depth: 4 cm., weight: 800 g.

#### NS 44 · SECTION THROUGH THE HIP JOINT

Natural size, in SOMSO-Plast. Frontal section. In one piece. Height: 26 cm., width: 32 cm., depth: 4 cm., weight: 900 g.

#### NS 45 · SECTION THROUGH THE HAND

Natural size, in SOMSO-Plast. Sagittal section. In one piece. Height: 26 cm., width: 32 cm., depth: 4 cm., weight: 800 g.

#### NS 46 · SECTION THROUGH THE ELBOW

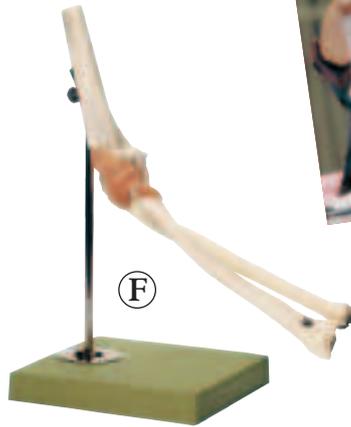
Natural size, in SOMSO-Plast. Sagittal section. In one piece. Height: 26 cm., width: 32 cm., depth: 4 cm., weight: 800 g.

#### NS 47 · SECTION THROUGH A NORMAL FOOT

Natural size, in SOMSO-Plast. Sagittal section. In one piece. Height: 26 cm., width: 32 cm., depth: 4 cm., weight: 800 g.

#### NS 48 · SECTION THROUGH THE SHOULDER JOINT

Natural size, in SOMSO-Plast. Frontal section. In one piece. Height: 26 cm., width: 32 cm., depth: 4 cm., weight: 900 g.



NS 52

#### NS 50 · FUNCTIONAL MODEL OF THE KNEE JOINT

Natural size, in SOMSO-Plast. Removable from base. Height: 34 cm., width: 18 cm., depth: 18 cm., weight: 1 kg.

#### NS 51 · FUNCTIONAL MODEL OF THE HIP JOINT

Natural size, in SOMSO-Plast. Removable from stand with base. Height: 35 cm., width: 20 cm., depth: 18 cm., weight: 1,25 kg.



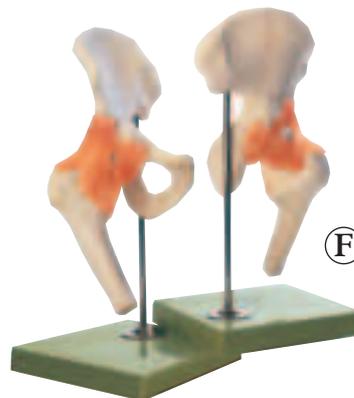
NS 51

#### NS 53 · FUNCTIONAL MODEL OF THE SHOULDER JOINT

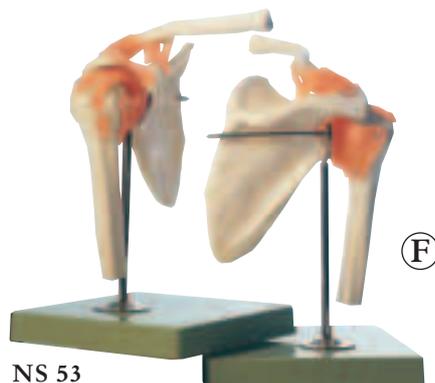
Natural size, in SOMSO-Plast. Removable from stand with base. Height: 26 cm., width: 19 cm., depth: 22 cm., weight: 650 g.

#### NS 52 · FUNCTIONAL MODEL OF THE ELBOW JOINT

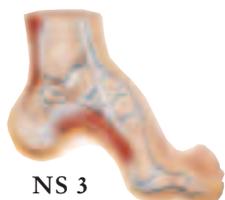
Natural size, in SOMSO-Plast. Removable from stand with base. Height: 41 cm., width: 19 cm., depth: 22 cm., weight: 650 g.



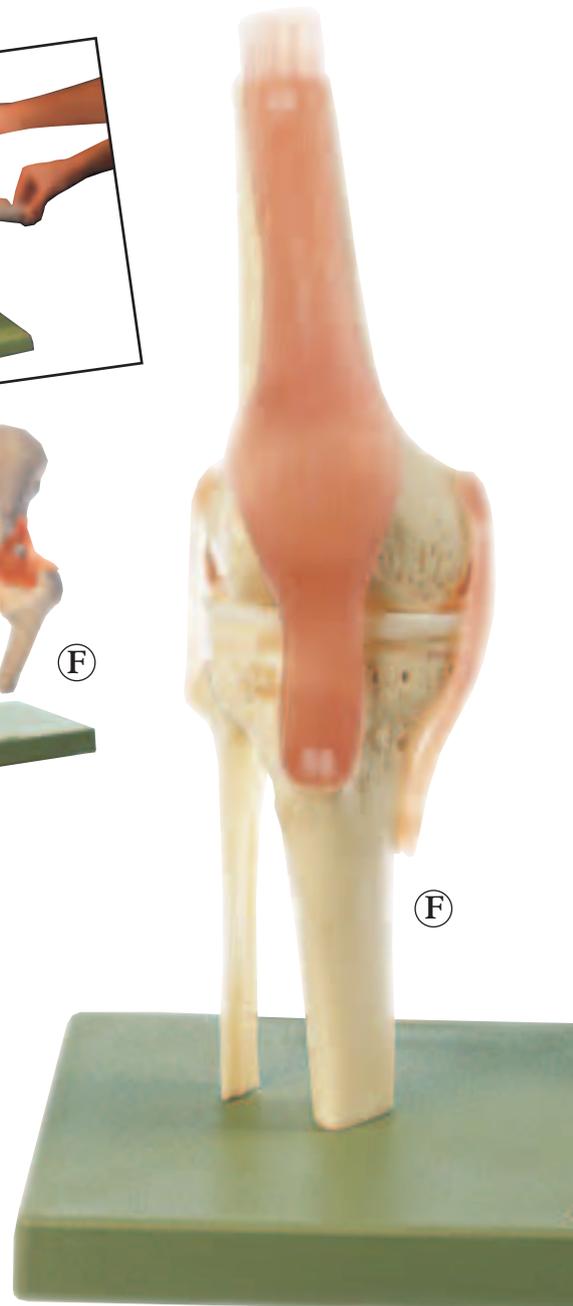
NS 53



ⓕ



NS 3



NS 50

*Over 1,000  
anatomical, zoological  
and botanical models*

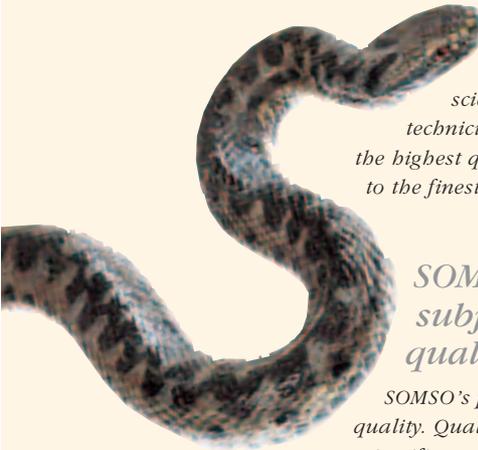


*Applying to nearly every one of these models is the „SOMSO SUN“, the instantly recognisable and world famous registered trade mark. To produce the teaching aids for studying anatomy, zoology and botany the company has a quite simple, but demanding philosophy: „Nature is Our Model“.*



*Each and every model  
in the range demon-  
strates SOMSO's  
commitment to the hig-  
hest standards of scienti-  
fic accuracy and artistry.*

*From concept through  
prototype to limited or series  
production, only specialist  
scientists, model makers and  
technicians are employed to produce  
the highest quality models, accurate down  
to the finest detail.*



*SOMSO Modelle-  
subject to stringent  
quality controls*

*SOMSO's primary concern is for  
quality. Quality that passes the tests for  
scientific accuracy, paintwork, function,  
durability and materials. Genuine SOMSO  
Modelle reflect these quality criteria,  
and their base material is virtually  
unbreakable SOMSO-Plast.*



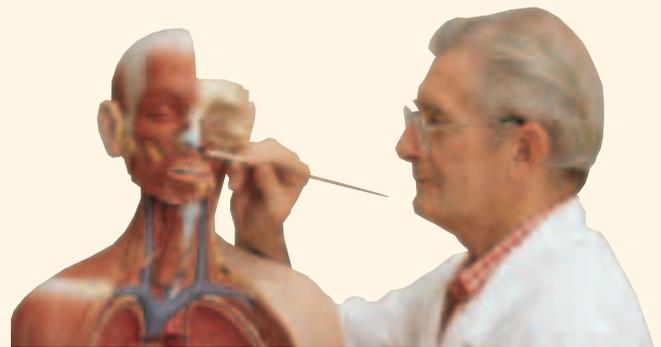
*A family-run firm  
founded in 1876*

*The company has been owned and  
managed by five generations of the  
Sommer family since it was first  
established in 1876.*



*The Sommer family  
management in 2001.*

# *Nature is*



*Hand assembly and  
finishing by German  
craftsmen*

*SOMSO Modelle are produced only  
in Sonneberg or Coburg - nowhere else -  
by highly qualified and skilled craftsmen.  
Some components are now machine-made,  
but all models are assembled and painted  
entirely by hand so that each is a unique  
work of art.*





**SOMSO**  
MODELLE  
SINCE 1876

## *SOMSO SUN, the symbol of quality*

*SOMSO was founded in Sonneberg, Thuringia more than 125 years ago. Since then, SOMSO Modelle have proved to be the benchmark to which others aspire, recognised by the most discerning experts as the ultimate for teaching aids and scientific demonstration. For the Sommer family this is the motivation that drives them to contribute now, and in the future, to training and teaching in the service of science*

*World-wide appreciation from the science and teaching professions and from museums*

*SOMSO Modelle are indispensable for practical teaching of general biology in schools. The „Nature is Our Model“ range is superbly instructive, particularly in accuracy, quality and colour, enabling students to experience nature in an incomparable, hands-on manner.*

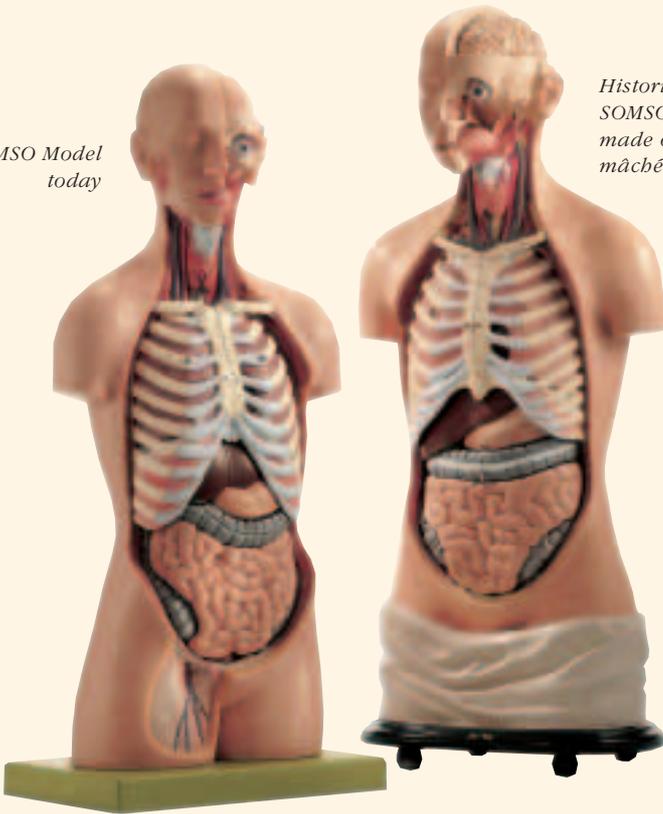


*Appropriately proportioned SOMSO Modelle are in use in science laboratories and lecture halls of universities and colleges throughout the world, making an important contribution to the efficient instruction of trainee doctors and nurses.*

# *Our Model*

*For many decades, SOMSO Modelle have been permanently displayed in private collections and public museums, and are of unique interest to specialists and lay visitors alike.*

*SOMSO Model today*



*Historical SOMSO Model made of papier mâché from 1899*



**SOMSO**  
MUSEUM  
SONNEBERG

## *The SOMSO-Museum in Sonneberg/Thuringia*

*Marcus Sommer founded the SOMSO workshop on 17th July 1876 in Sonneberg, Thuringia, Germany.*

*On the occasion of the 125th anniversary of SOMSO Modelle the Family Sommer has opened the SOMSO Museum at the parent company in Sonneberg, Thuringia. At the present point you are able to see in 10 different stages the variety of SOMSO Modelle and their 125-years history.*





QS 3



QS 3/2



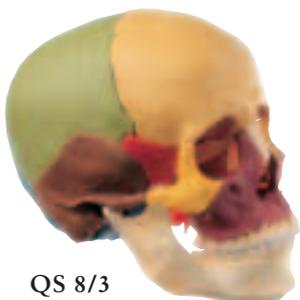
QS 7/6



QS 7/E



QS 7



QS 8/3



QS 9



### QS 3 · ARTIFICIAL SKULL OF A FETUS

Modeled according to nature, in SOMSO-Plast. Upper and lower jaw are open. Weight: 180 g.

### QS 3/2 · ARTIFICIAL SKULL OF CHILD (ABOUT 6 YEARS OLD)

Natural cast, in SOMSO-Plast. Altogether 2 parts. Weight: 380 g.

### QS 7 · ARTIFICIAL HUMAN SKULL

Natural cast, in SOMSO-Plast. Separates into 3 parts. Weight: 800 g.

### QS 7/6 · ARTIFICIAL HUMAN SKULL, FEMALE

Natural cast, in SOMSO-Plast. Separates into 3 parts. Weight: 700 g.

### QS 7/E · ARTIFICIAL HUMAN SKULL

Natural cast, in SOMSO-Plast. Separates into 3 parts. Weight: 800 g.

### QS 10/1 · ARTIFICIAL HUMAN SKELETON

Natural cast of the bones of a male adult, in SOMSO-Plast. With rollers on the base of the stand. Height: 180 cm. (skeleton 170 cm.), width: 55 cm., depth: 55 cm., weight: 10.4 kg.

### QS 10/E · ARTIFICIAL HUMAN SKELETON W. ILL.

Natural cast of the bones of a male adult, in SOMSO-Plast. Mounted upright on a stand. With a dustproof cover. Height: 179 cm. (skeleton 170 cm.), width: 55 cm., depth: 55 cm., weight: 10 kg.

### QS 8/3 · 14-PIECE MODEL OF THE HUMAN SKULL

Natural size, made from SOMSO-Plast after Prof. Dr. Dr. J. W. Rohen, Department of Anatomy, University of Erlangen. Weight: 700 g.

### QS 9 · ARTIFICIAL BAUCHENE SKULL OF AN ADULT

Natural cast, in SOMSO-Plast. Separates into 16 parts. Height: 40 cm., width: 26 cm., depth: 39 cm., weight: 1.9 kg.



QS 10/1

The height and dimensions comply with the Central European average.



QS 10/6

**QS 10/6 · ARTIFICIAL HUMAN SKELETON**

Natural cast of the bones of a male adult, in SOMSO-Plast. As QS 10/1, but on the right side presentation of the articular ligaments on the knee, the hip, the elbow and on the shoulder. Weight: 11.2 kg.



QS 10/8

**QS 10/8 · ARTIFICIAL HUMAN SKELETON**

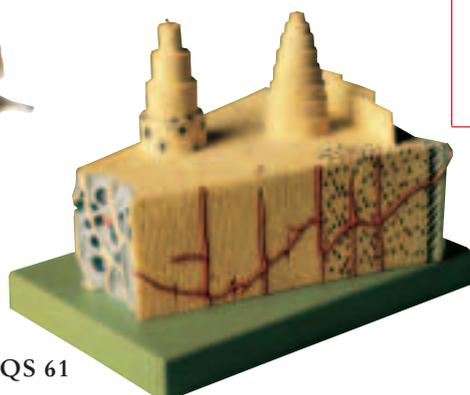
Natural cast of the bones of a female adult, in SOMSO-Plast. With rollers on the base of the stand. Height: 181 cm. (skeleton 171 cm.), width: 55 cm., depth: 55 cm., weight: 10.7 kg.

**QS 17 · VERTEBRA**

Choose from cervical, thoracic or lumbar vertebra. Weight: cervical vertebra 20 g, thoracic vertebra 25 g, lumbar vertebra 60 g.



QS 17



QS 61



QS 10/9

**QS 10/9 · ARTIFICIAL HUMAN SKELETON**

Natural cast of the bones of a male adult, in SOMSO-Plast. The right side shows all the muscles from head to foot with their areas of origin and onset in colour (origin = red, onset = blue). On the left side the single bones are numbered (more than 500 numbers). Weight: 10.4 kg.

**QS 61 · CONSTRUCTION OF BONE**

Enlarged many times in SOMSO-Plast. Shown in a wedge segment from the compact part of a pipe bone. Shows Haversian lamellae, outer bone- and interstitial lamellae etc. In one piece. On a base. Height: 28 cm., width: 39 cm., depth: 26 cm., weight: 2.82 kg.



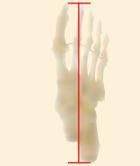
Maximum cranium circumference:  
Female = 50.8 cm.,  
male = 51.2 cm.



Cranium length (Glabella-Ophistocranium line):  
Female = 18.3 cm.,  
male = 17.5 cm.



Cranium width (Euryon distance):  
Female = 12.8 cm.,  
male = 14.1 cm.



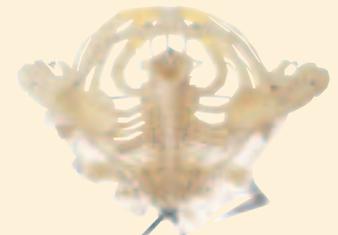
Hand skeleton length (Styilion-Dactylion III):  
Female = 18 cm.,  
male = 19 cm.



Foot skeleton length (Pternion-Acropodion):  
Female = 22.2 cm.,  
male = 25 cm.



Detail – Hyoid bone



Detail – Thorax bone from the top

*The assembly of SOMSO skeletons is anatomically correct, functional and practice-orientated.*



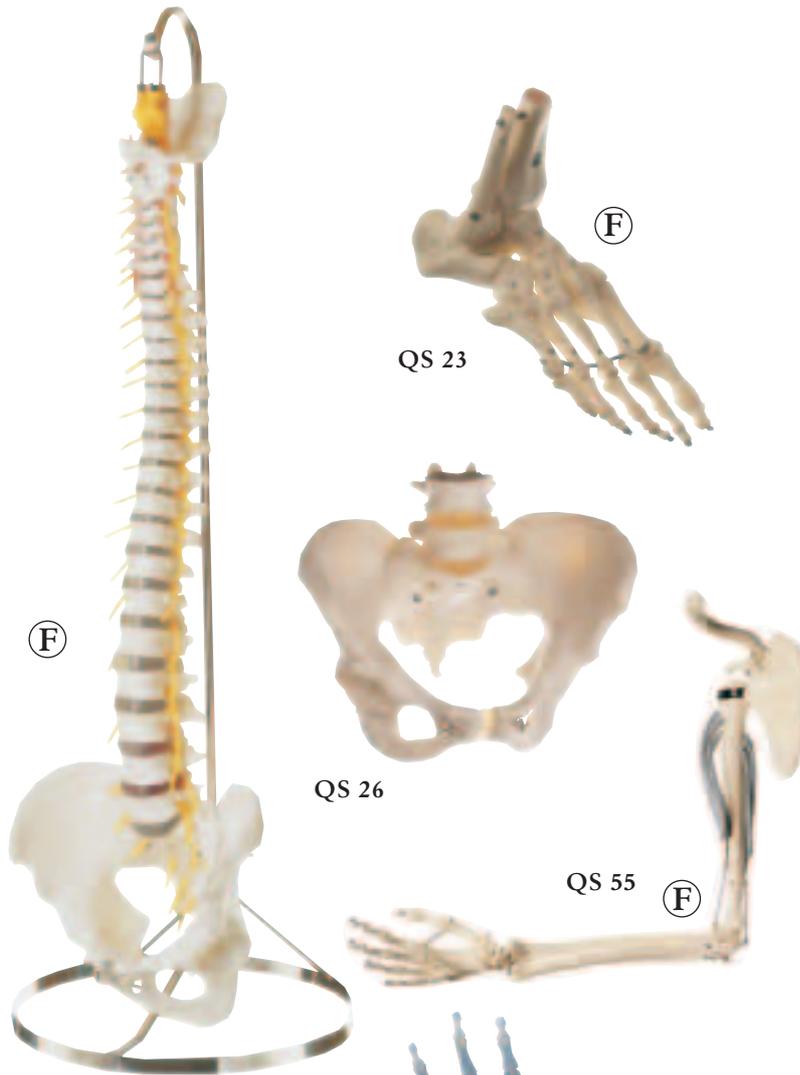
Detail – Wrist bone



Detail – Tarsus bone



**QS 21/5**  
*Demonstration of wrong position with SOMSO-vertebral column*  
1. Flat back  
2. Hollow back  
3. Round back



**QS 21/5 · VERTEBRAL COLUMN WITH PELVIS**

Cast from natural specimen, in SOMSO-Plast. Mounted and flexible, showing the arteria vertebralis, the spinal cord, the spinal nerves leaving it and the connected ganglion cells. With prolapse of the intervertebral disc and laminectomy. With stand for hanging. Weight: 3,6 kg.

**QS 23 · SKELETON OF THE FOOT (ELASTIC MOUNTING)**

Cast from natural specimen, in SOMSO-Plast. With numbering. Weight: 440 g.

**QS 26 · SKELETON OF FEMALE PELVIS**

Cast from natural specimen, in SOMSO-Plast. Consisting of the two upper parts of ilium, sacrum and coccyx and 4th and 5th lumbar vertebrae, as well as the discs and symphysis. Mounted. Weight: 1.1 kg.

**QS 31/4 · HAND SKELETON, RIGHT (MOVABLE JOINT MECHANISMS AND COLOUR)**

Life-size, made of SOMSO-Plast, with lower arm attachment. In one piece. Weight: 200 g.

**QS 55 · MOVEMENTS OF MUSCLES IN THE UPPER ARM**

Natural size, in SOMSO-Plast. The muscles of the upper arm are of an elastic material. By bending and stretching the arm the flexion and extension of the muscles can be shown. Weight: 740 g.

**QS 55/2 · MOVEMENT OF MUSCLES IN THE UPPER ARM AND FOREARM**

Natural size, in SOMSO-Plast. Showing the bending and stretching muscles of the upper arm and the rotator muscles of the forearm. On a stand and base. Height: 83 cm., width: 45 cm., depth: 26 cm., weight: 2 kg.

**QS 65 · CERVICAL VERTEBRAL COLUMN**

Cast from natural specimen, in SOMSO-Plast. Removable on a stand with base. Height: 22 cm., width: 18 cm., depth: 21 cm., weight: 500 g.

**QS 68/3 · CENTRAL AND DORSOLATERAL HERNIA OF INTERVERTEBRAL DISC**

Natural size, in SOMSO-Plast. Separates altogether into 4 parts. On a base. Height: 13 cm., width: 14 cm., depth: 15 cm., weight: 300 g.

(F)

QS 31/4

(F)

QS 55/2

(F)

QS 65

(F)

QS 68/3

**ZoS 50 · SKULL OF GORILLA**

Gorilla g. gorilla (Savage a. Wyman 1847), male, in SOMSO-Plast. Natural cast. Lower jaw movable and can be removed. Weight: 1.07 kg.

**ZoS 53 · SKULL OF CHIMPANZEE**

Pan tr. troglodytes (Blumenbach 1799), male, natural cast, in SOMSO-Plast. Lower jaw movable and can be removed. Weight: 420 g.

**ZoS 53/1 · SKULL OF YOUNG CHIMPANZEE**

Pan tr. troglodytes (Blumenbach 1799), natural cast, in SOMSO-Plast. Lower jaw movable and can be removed. Weight: 160 g.

**ZoS 53/2 · SKULL OF CHIMPANZEE**

Pan tr. troglodytes, female, natural cast, in SOMSO-Plast. Lower jaw movable and can be removed. Weight: 500 g.

**ZoS 53/4 · SKULL OF A RHESUS-APE**

Macaca mulatta, male, natural cast, in SOMSO-Plast. Lower jaw movable and can be removed. Weight: 160 g.

**ZoS 53/107 · ARTIFICIAL SKULL OF CHIMPANZEE MALE**  
natural cast, in SOMSO-Plast. Separates in 3 pieces. Weight: 607 g

**ZoS 53/110 · ARTIFICIAL SKELETON OF CHIMPANZEE**

Pan. tr. troglodytes, Natural cast of the bones of an adult male, in SOMSO-Plast. Skull can be separated in 3 pieces. The right and left foot can be detached from the leg. Mounted upright on a stand. Height: 90 cm., width: 82 cm., depth: 40 cm., weight: 10.3 kg

**ZoS 53/116 · ARTIFICIAL PELVIS OF A CHIMPANZEE**

Natural cast, in SOMSO-Plast. Weight: 640 g

**ZoS 53/122 · ARTIFICIAL FOOT SKELETON OF A CHIMPANZEE**

Natural cast, in SOMSO-Plast. Weight: 120 g

**ZoS 53/131 · ARTIFICIAL HANDSKELETON OF A CHIMPANZEE**

Natural cast, in SOMSO-Plast. Weight: 107 g



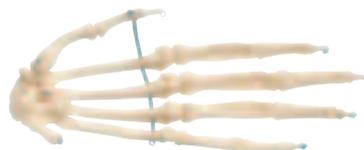
ZoS 53/110



ZoS 53/107



ZoS 53/116



ZoS 53/131



ZoS 53/122



ZoS 53/4



ZoS 50



ZoS 53/2



ZoS 53/1



ZoS 53

More models of this series are shown in our zoological catalogue A 74/2+3. Please ask for it in case of demand!



ZoS 49/32



ZoS 49



ZoS 49/31

*The world of insects – a series of SOMSO models. The flea, louse, white ant, aphid, ant and fly models are the first of a series of small insect models with which comparative morphology and phylogeny can be studied. Proposed additions to the new series of insect models; springtail ZoS 49/3, silverfish ZoS 49/5 and ground beetle ZoS 49/26.*



ZoS 47/1

**ZoS 47/1 · MODEL OF THE WORKER BEE**

Honey-bee, *Apis mellifica*, enlarged approximately 25 times, in SOMSO-Plast. Altogether in 3 parts. On a stand with base. Height: 50 cm., width: 47 cm., depth: 15 cm., weight: 1.8 kg.

**ZoS 48/1 · HEAD OF BEE**

*Apis mellifica*, modelled from nature on a scale 50 : 1, in SOMSO-Plast. After Dr. E. Schicha. Separates into 2 parts. On a stand and base. Height: 34 cm., width: 18 cm., depth: 19 cm., weight: 800 g.



ZoS 48/3 ·



ZoS 48/6



ZoS 48/4



ZoS 48/2



ZoS 48/1

The series of the insects was developed in co-operation with Dr. E. Schicha. In SOMSO-Plast, each on a stand with base.

**ZoS 48/2 · HEAD OF A BUTTERFLY**

*Pieris brassicae*, according to nature on a scale 50 : 1. Altogether 5 parts. Height: 82 cm. (with antennae), width: 18 cm., depth: 25 cm., weight: 900 g.

**ZoS 48/3 · HEAD OF A GNAT**

*Culex pipiens*, head of a female gnat, according to nature on a scale 80 : 1. Height: 40 cm., width: 18 cm., depth: 45 cm., weight: 800 g.

**ZoS 48/4 · HEAD OF A FLY**

*Musca domestica*, according to nature on a scale 50 : 1. Height: 27 cm., width: 18 cm., depth: 20 cm., weight: 700 g.

**ZoS 48/6 · MODEL OF THE HEAD OF A COCKROACH**

*Periplaneta americana*. Modelled from nature on a scale 50 : 1. Separates into 3 parts. Height: 41 cm., width: 27 cm., depth: 18 cm., weight: 1 kg.

**ZoS 49 · COMPOUND OR FACET EYE**

enlarged approximately 200 times, in SOMSO-Plast. Showing the delicate histological structure. Height: 33 cm., width: 29 cm., depth: 18 cm., weight: 900 g.

**ZoS 49/31 · MODEL OF A FLY**

*Musca domestica* - common housefly. This model of a housefly on a scale of 30 : 1. Height: 23 cm., width: 22 cm., depth: 26 cm., weight: 500 g.

**ZoS 49/32 · FLEA**

*Ctenocephalides felis*. The cat flea is modelled to a scale of approx. 70 : 1 being 18 cm long from head to tip of abdomen and 22.5 cm high including the stretched legs. Height: 25 cm., width: 12 cm., depth: 18 cm., weight: 500 g.



ZoS 101



ZoS 101/1



ZoS 106



ZoS 107



ZoS 116/3

**ZoS 107 · SLIPPER ANIMALCULE**

Paramecium, enlarged approx. 1600 times, in SOMSO-Plast. After Studiendirektor Christian Groß. Separates into 2 parts, on a stand with base and explanatory notes. Height: 61 cm., width: 39 cm., depth: 26 cm., weight: 2.7 kg

**ZoS 108 · EARTHWORM**

Lumbricus terrestris, enlarged 25 times, in SOMSO-Plast. After Studiendirektor Christian Groß. Separates into 3 parts, on a stand with explanatory notes on the base. Height: 25 cm., width: 53 cm., depth: 14 cm., weight: 2.2 kg.

**ZoS 114 · STAR-FISH**

Asterias, many times enlarged, in SOMSO-Plast. After Studiendirektor Christian Groß. The model can be taken from its stand. Altogether in 3 parts. Height: 31 cm., width: 53 cm., depth: 35 cm., weight: 2.2 kg.

**ZoS 116/3 · MODEL-BOARD OF THE TAPE-WORM**

Enables comparison of the pork tape-worm, Taenia solium with the beef tape-worm. Taenia saginata, enlarged many times, in SOMSO-Plast. After Studiendirektor Christian Groß. In one piece, on a base plate. Height: 38 cm., width: 61 cm., depth: 10 cm., weight: 3.1 kg.

**ZoS 121 · MODEL OF A WATER-FLEA**

Daphnia pulex, in SOMSO-Plast, after Studiendirektor Christian Groß. In total the model separates into 6 parts. On a stand and base. Height: 50 cm., width: 42.5 cm., depth: 35 cm., weight: 2.5 kg.

**ZoS 101 · MODEL OF A SINGLE CELL CHANGING ANIMALCULE**

Amoeba proteus, enlarged approx. 1000 times linearly after Prof. Dr. M. Lindauer and Studiendirektor Christian Groß. In SOMSO-Plast. On a base with explanatory notes. Separates into 2 parts. Height: 8 cm., width: 48 cm., depth: 31 cm., weight: 1.8 kg.

**ZoS 101/1 · GLOBOROTALIA MENARDII**

Planctonic foraminifer, in SOMSO-Plast. In co-operation with Dr. Barbara Donner. Size 0,5 mm (ø), weight: 104 g.

**ZoS 106 · FRESH WATER POLYP**

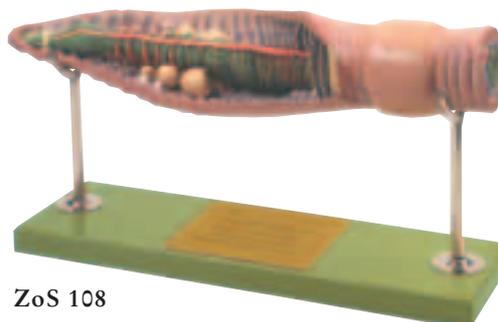
Hydra, enlarged approx. 30 times, in SOMSO-Plast. After Studiendirektor Christian Groß. In one piece, on a base with explanatory notes. Height: 46 cm., width: 39 cm., depth: 33 cm., weight: 2.1 kg.



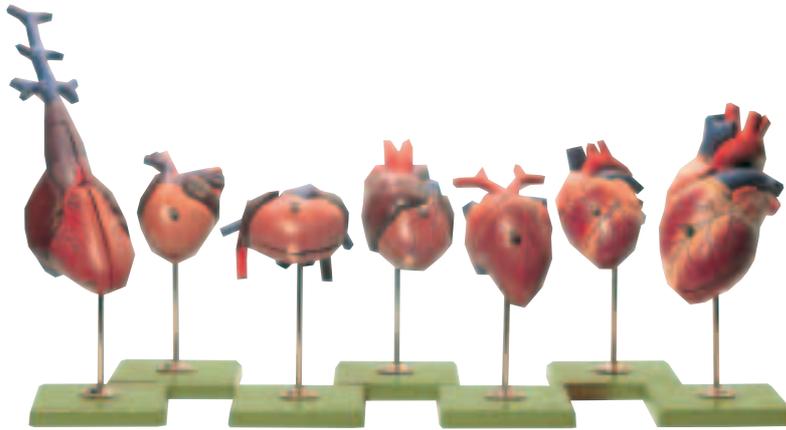
ZoS 121



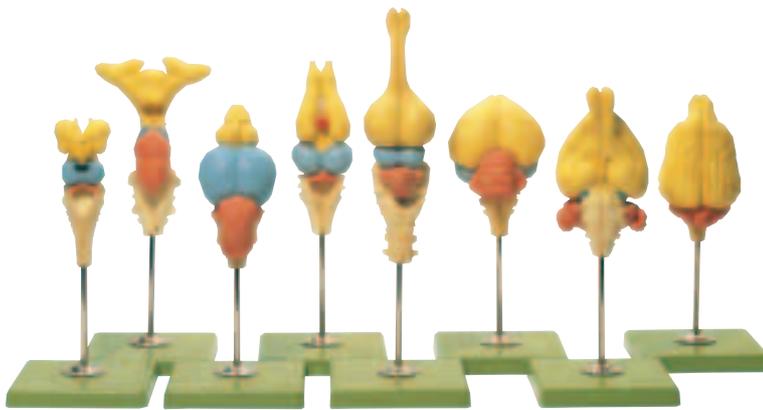
ZoS 114



ZoS 108



ZoS 54/1



ZoS 55



ZoS 103



ZoS 103/5



ZoS 110/1



ZoS 120



ZoS 59/M

### ZoS 54/1 · MODELS OF THE HEARTS OF VERTEBRATES

In SOMSO-Plast. Altogether 7 models, natural size and slightly enlarged, mounted on a base each. 1. Fish (*Esox lucius*), 2. Frog (*Rana esculenta*), 3. Tortoise (*Emys orbicularis*), 4. Crocodile (*Crocodylus niloticus*), 5. Bird (golden eagle) - (*Aquila chrysaetos*), 6. Dog (*Canis lupus familiaris*) and 7. Human Being (*Homo sapiens*). Weight of the series: 2.9 kg.

### ZoS 55 · MODELS OF THE BRAINS OF VERTEBRATES

In SOMSO-Plast. Altogether 8 models (many times enlarged): 1. Lampetra fluviatilis, 2. Dogfish (*Scyliorhinus caniculus*), 3. Trout (*Salmo trutta fario*), 4. Frog (*Rana esculenta*), 5. Alligator (*Alligator mississippiensis*), 6. Dove (*Columba livia domestica*), 7. Rabbit (*Oryctolagus cuniculus*), 8. Dog (*Canis lupus familiaris*). Each on a base. Weight of the series: 1.6 kg.

### ZoS 57 · DIVISION OF THE CELL

Enlarged many times, in SOMSO-Plast. Altogether 8 models. Individually mounted on stands, with bases. Weight of the series: 2.7 kg.

### ZoS 57/1 · MITOSIS

After Studiendirektor Christian Groß. Enlarged many times, in SOMSO-Plast. 8 separate models, each in one piece. The models are mounted individually on a stand with base. Weight of the series: 7.1 kg.

### ZoS 57/2 · MEIOSIS

As a component of cell division, shown by 8 models with 2 explanatory introductory models, enlarged many times, in SOMSO-Plast. After Studiendirektor Christian Groß. In one piece. Individually mounted on a stand with base. Weight of the series: 3.3 kg.



ZoS 57/4

**ZoS 57/3 · CHANGE OF NUCLEAR PHASES IN THE MATURATION OF SPERM AND OVUM (MEIOSIS)**

Many times enlarged. After Studiendirektor Christian Groß. In SOMSO-Plast. Consisting of 5 single models. Individually mounted on stand with base. Weight of the series: 2 kg.

**ZoS 57/4 · CHROMOSOME MODEL**

Scale 50,000 : 1, made of SOMSO-Plast. The model as been made in co-operation with Studiendirektor Christian Groß. In one piece, on a base. Height: 46 cm., width: 18 cm., depth: 18 cm., weight: 1,4kg.

**ZoS 58 · EQUAL CELL DIVISION AND THE FORMATION OF THE NUCLEAR MEMBRANE IN THE BRANCHIOSTOMA LANCEOLATUM**

Amphioxus, Lancelet, enlarged approx. 500 times, in SOMSO-Plast. Nine models (A - J) on stands with bases show the various stages in cell division, the formation of the blastula and original membrane. In one piece. Weight of the series: 1.9 kg.

**ZoS 59/M · LANCELET**

Cross section, enlarged approx. 150 times, in SOMSO-Plast. In one piece, on a stand with base. Height: 25 cm., width: 68 cm., depth: 14 cm., weight: 3 kg.

**ZoS 103 · STRUCTURE OF CHICKEN'S EGG**

After Studiendirektor Christian Groß. Enlarged 6,5 times linearly, in SOMSO-Plast. In one piece, on a stand and base with explanatory notes. Height: 43 cm., width: 39 cm., depth: 26 cm., weight: 3,5 kg.

**ZoS 103/5 · CHICKEN'S EMBRYO AFTER APPROXIMATELY 4 DAYS INCUBATION**

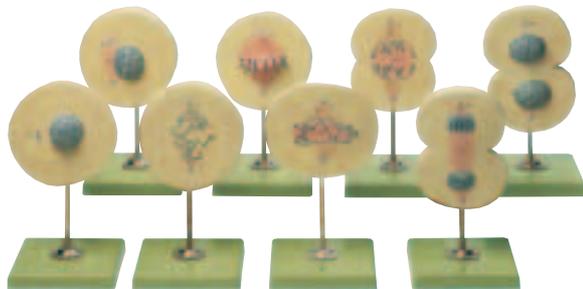
enlarged 45 times linearly. In SOMSO-Plast. In one piece, on a stand with base. Height: 45 cm., width: 26 cm., depth: 18 cm., weight: 1.4 kg.

**ZoS 110/1 · ANIMAL CELL**

Enlarged 10000 times, in SOMSO-Plast. After Studiendirektor Christian Groß. In one piece, on a stand with base and explanatory notes. Height of the model: 22 cm., total height: 37 cm., width: 18 cm., depth: 18 cm., weight: 1 kg.

**ZoS 120 · ANIMAL CELL**

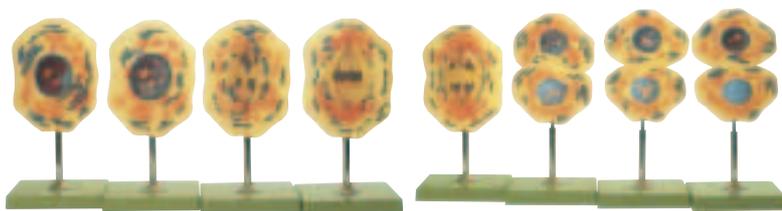
Enlarged 20000 times, in SOMSO-Plast. After Studiendirektor Christian Groß. In one piece, on a stand with base. Height: 52 cm., width: 39 cm., depth: 26 cm., weight: 3,7 kg.



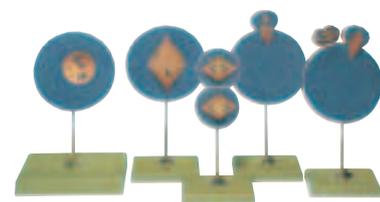
ZoS 57



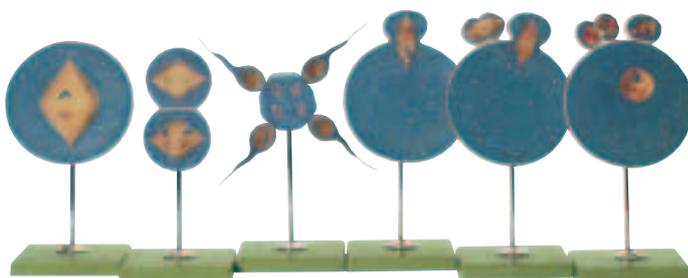
ZoS 58



ZoS 57/1



ZoS 57/3



ZoS 57/2





**ZoS 1008 ·**  
MIDWIFE TOAD, MALE  
*Alytes obstetricans*. Height:  
7.5 cm., width: 12 cm., depth:  
12 cm., weight: 140 g.



**ZoS 1008/1 ·**  
MIDWIFE TOAD,  
FEMALE  
*Alytes obstetricans*. Height:  
7.5 cm., width: 12 cm., depth:  
12 cm., weight: 130 g.



**ZoS 1023 ·**  
EDIBLE FROG, MALE  
*Rana esculenta*. Height:  
7.5 cm., width: 12 cm.,  
depth: 12 cm., weight: 200 g.



**ZoS 1024 ·**  
EDIBLE FROG, FEMALE  
*Rana esculenta*. Height:  
7.5 cm., width: 12 cm., depth:  
12 cm., weight: 200 g.



**ZoS 1012 ·**  
COMMON TOAD, MALE  
*Bufo bufo*. Height: 7.5 cm.,  
width: 12 cm., depth: 12 cm.,  
weight: 200 g.



**ZoS 1013 ·** COMMON  
TOAD, FEMALE  
*Bufo bufo*. Height: 7.5 cm.,  
width: 12 cm., depth: 12 cm.,  
weight: 200 g.



**ZoS 1017 ·**  
COMMON FROG, MALE  
*Rana temporaria*. Height:  
7.5 cm., width: 12 cm., depth:  
12 cm., weight: 200 g.



**ZoS 1018 ·**  
COMMON FROG, FEMALE  
*Rana temporaria*. Height:  
7.5 cm., width: 12 cm., depth:  
12 cm., weight: 200 g.



**ZoS 1014 ·**  
NATTERJACK  
*Bufo calamita*.  
Height: 7.5 cm., width: 12 cm.,  
depth: 12 cm., weight: 100 g.



**ZoS 1015 ·**  
GREEN TOAD  
*Bufo viridis*. Height: 7.5 cm.,  
width: 12 cm., depth: 12 cm.,  
weight: 200 g.



**ZoS 1025/1 ·**  
GREEK TORTOISES, MALE  
*Testudo hermanni*.  
Height: 10 cm., width: 18 cm., depth:  
18 cm., weight: 500 g.



**ZoS 1010/1 ·**  
FIRE-BELLIED TOAD  
*Bombina orientalis*. Height:  
7.5 cm., width: 12 cm., depth:  
12 cm., weight: 100 g.



**ZoS 1009 ·**  
YELLOW-BELLIED TOAD  
*Bombina orientalis*. Height:  
7.5 cm., width: 12 cm., depth:  
12 cm., weight: 100 g.

**ZoS 1004 ·**  
ALPINE NEWT,  
MALE AND  
FEMALE  
*Triturus alpestris*.  
Height: 7.5 cm.,  
width: 12 cm.,  
depth: 12 cm., weight: 140 g.



**ZoS 1016/1 ·**  
COMMON TREE FROG,  
FEMALE (2 MODELS)  
*Hyla arborea*. Height:  
7.5 cm., width: 12 cm., depth:  
12 cm., weight: 100 g.



**ZoS 1025 ·** EUROPEAN  
POND TERRAPIN, MALE  
*Emys orbicularis*. Height:  
10 cm., width: 18 cm.,  
depth: 18 cm., weight: 500 g.

**ZoS 1006 ·**  
CRESTED NEWT,  
MALE AND  
FEMALE  
*Triturus cristatus*.  
Height: 14 cm.,  
width: 18 cm.,  
depth: 18 cm.,  
weight: 200 g.



**ZoS 1000 · ALPINE SALAMANDER**

*Salamandra atra.*  
 Height: 7,5 cm.,  
 width: 12 cm.,  
 depth: 12 cm.,  
 weight: 100 g.



**ZoS 1001 · FIRE SALAMANDER, MALE**

*Salamandra s. salamandra.*  
 Height: 7,5 cm.,  
 width: 12 cm.,  
 depth: 12 cm., weight: 200 g.



**ZoS 1002 · FIRE SALAMANDER, FEMALE**

*Salamandra s. salamandra.*  
 Height: 7,5 cm.,  
 width: 12 cm.,  
 depth: 12 cm., weight: 200 g.



**ZoS 1026/2 · SLOW WORM, FEMALE**

*Anguis fragilis.*  
 Height: 6,5 cm.,  
 width: 32 cm.,  
 depth: 19 cm., weight: 460 g.



**ZoS 1027 · COMMON WALL LIZARD, MALE**

*Podarcis muralis.*  
 Height: 11 cm.,  
 width: 18 cm.,  
 depth: 18 cm., weight: 300 g.



**ZoS 1027/1 · COMMON WALL LIZARD, FEMALE**

*Podarcis muralis.*  
 Height 10 cm.,  
 width: 18 cm.,  
 depth: 18 cm., weight: 300 g.



**ZoS 1030 · SAND LIZARD**

*Lacerta agilis.*  
 Height: 10 cm.,  
 width: 18 cm.,  
 depth: 18 cm.,  
 weight: 230 g.



**ZoS 1030/1 · HEDGE LIZARD, FEMALE**

*Lacerta agilis.*  
 Height: 7,5 cm.,  
 width: 12 cm.,  
 depth: 12 cm.,  
 weight: 100 g



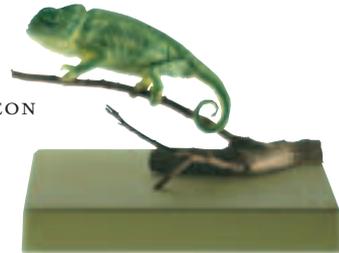
**Nature is Our Model**

- with regard to production it means that SOMSO is meticulous down to the smallest detail, especially when looking on the ventral view of the animal sculptures - in both form and scientific accuracy. The amphibians and reptiles of central europe can be accurately identified using SOMSO Modelle. All animals sculptures are racially typical according to nature.



**ZoS 1206 · CHAMELEON**

*Chamaeleo.*  
 Height: 15 cm.,  
 width: 12 cm.,  
 depth: 12 cm.,  
 weight: 150 g.



**ZoS 1033 · GRASS SNAKE, FEMALE**

*Natrix natrix.*  
 Height: 6,5 cm.,  
 width: 32 cm.,  
 depth: 19 cm., weight: 700 g.



**ZoS 1036 · COMMON VIPER, YOUNG MALE**

*Vipera berus.*  
 Height: 10 cm.,  
 width: 18 cm.,  
 depth: 18 cm., weight: 300 g.



**ZoS 1204 · MOORISH GECKO, MALE**

*Tarantola mauritania.*  
 Height: 8 cm.,  
 width: 12 cm.,  
 depth: 12 cm., weight: 200 g.



**ZoS 2001 · SEA-HORSE**

*Hippocampus.*  
 Height: 8,5 cm.,  
 weight: 50 g.





ZoS 100



ZoS 6/1

### ZoS 1 · Cow

Approximately 1/3 natural size, in SOMSO-Plast. Altogether 11 parts. Mounted on a removable base with rollers. Showing the paunch puncture. Height: 54 cm., width: 85 cm., depth: 25 cm., weight: 16.8 kg.

### ZoS 6/1 · RUMINANT STOMACH OF THE COW

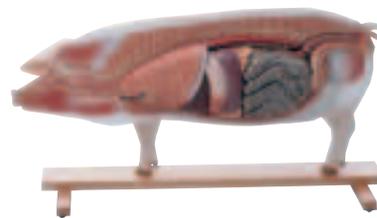
1/3 natural size, in SOMSO-Plast. Separates into 3 parts. On a stand and base. Height: 35 cm., width: 28 cm., depth: 18 cm., weight: 1.7 kg.

### ZoS 18/1 · MODEL OF A BREEDING PIG (DAM)

based on a breeding pig from the Bavarian State Institute for Animal Breeding in Grub, approx. 1/2 natural size, in SOMSO-Plast. Separates altogether into 17 parts. Height: 48 cm., width: 102 cm., (-length of the model), depth: 26 cm., weight: 21 kg.



ZoS 1



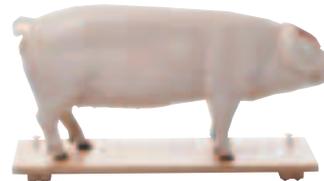
ZoS 18/1

### ZoS 26 · DOMESTIC HEN

Natural size, in SOMSO-Plast. Modelled from a natural skeleton. Altogether in 5 parts. On a base. Height: 49 cm., width: 45 cm., depth: 26 cm., weight: 2.4 kg



ZoS 100



### ZoS 100 · WATER FROG

*Rana esculenta*. After Studiendirektor Christian Groß. Illustration ratio: 4 : 1, in SOMSO-Plast. Separates altogether into 3 parts. On a base plate. Height: 39 cm., width: 62 cm., depth: 12 cm., weight: 3.9 kg.

### ZoS 105 · MODEL OF THE ANATOMY OF A BONY FISH

The model is that of a carp - *Cyprinus carpio*. In SOMSO-Plast. Modelled from life in natural size. Intestines, air-bladder and testicles removable. Separates into 4 parts. On a stand with base. Height: 35 cm., width: 49 cm., depth: 15 cm., weight: 1.6 kg.



ZoS 105

### ZoS 115 ·

ANATOMY OF THE HEAD OF A VENOMOUS SNAKE Adder, *Vipera b. berus* (Linne), enlarged approximately 15 times, in SOMSO-Plast. After Studiendirektor Christian Groß. Not detachable, on a stand with base. Height: 39 cm., width: 49 cm., depth: 26 cm., weight: 1.7 kg.



ZoS 105



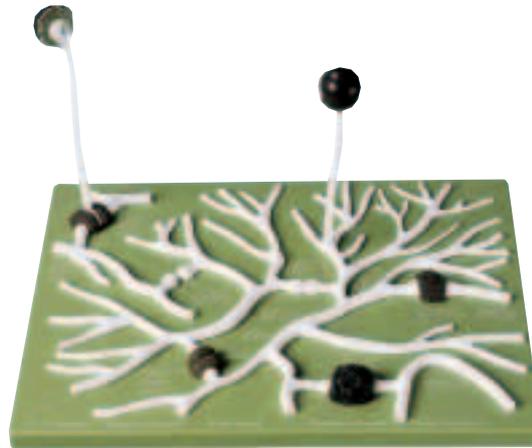
IN PREPARATION ARE THE FOLLOWING DETACHABLE MODELS: ZoS 27 CAT, ZoS 109 MODEL OF A SHEEP-DOG

# BOTANY

## FUNGI MODELS

### BoS 14/1 · WHITE MOULD

*Mucor mucedo*, enlarged approx. 250 times, in SOMSO-Plast, according to Prof. Dr. W. Weber. The model shows sexual and nonsexual generation. Separates into 3 parts. On base plate with explanatory note. Height: 18.5 cm., width: 32 cm., depth: 25.5 cm., weight: 600 g.



BoS 14/1

### BoS 28 · CANTHARELLUS CIBARIUS

FR. Edible. Height: 9 cm., width: 12 cm., depth: 12 cm., weight: 200 g.



BoS 28

### BoS 29 · LECCINUM AURANTIACUM

(BULL. ex ST. AM.) S.F. GRAY. Edible. Height: 20 cm., width: 14 cm., depth: 12 cm., weight: 600 g.



BoS 31

### BoS 31 · BOLETUS EDULIS

BULL. ex FR. Edible. Height: 15 cm., width: 13 cm., depth: 12 cm., weight: 350 g.



BoS 41

### BoS 41 · AMANITA MUSCARIA

(L. ex FR.) HOOKER. Poisonous. Height: 20 cm., width: 14 cm., depth: 14 cm., weight: 500 g.



BoS 227

### BoS 226 · DEVELOPMENT OF HAT FUNGI

natural size, in SOMSO-Plast. Submitted to Dr. rer. nat. A. Meixner, graduate chemist and fungi expert, Stuttgart. Can be separated into 6 parts. Height: 37 cm., width: 47 cm., depth: 15 cm., weight: 2 kg.

### BoS 227 · STRUCTURE OF HAT FUNGI

Large model, in SOMSO-Plast. Submitted to Dr. rer. nat. Axel Meixner, graduate chemist and fungi expert, Stuttgart. Can be separated into 4 pieces. On a base. Height: 45 cm., width: 40 cm., depth: 32 cm., (cap diameter 35 cm.), weight: 5.4 kg.



BoS 226



BoS 29

## CRYPTOGAMS

### BoS 14/3-A · MARCHANTIA POLYMORPHA

Approx. 10 times actual size, in SOMSO-Plast. After Prof. Dr. W. Weber. Separates into 5 parts. On a base with explanatory note. Height: 19 cm., width: 26 cm., depth: 32 cm., weight: 1 kg.

### BoS 14/2 · MARCHANTIA POLYMORPHA

Antheridium, enlarged approx. 1500 times, in SOMSO-Plast. After Prof. Dr. W. Weber. In one piece and on a base with explanatory note. H.: 35 cm., w.: 18 cm., d.: 18 cm., w.: 1 kg.

### BoS 14/3 · MARCHANTIA POLYMORPHA

Archegonium, enlarged approx. 1000 times, in SOMSO-Plast. After Prof. Dr. W. Weber. In one piece and on a base with explanatory note. H.: 36 cm., w.: 18 cm., d.: 18 cm., w.: 700 g.

### BoS 14/6 · MODEL OF THE MNIUM AFFINE (GAMETOPHYTE WITH SPOROPHYTE)

Enlarged approx. 12 times, in SOMSO-Plast. After Prof. Dr. W. Weber. Consists of 6 parts. On a stand with base and explanatory note. Height: 37 cm., width: 18 cm., depth: 18 cm., weight: 700 g.

### BoS 14/5 · MALE FERN, PROTHALLIUM

*Dryopteris filix-mas*, approximately 45 times size of original, in SOMSO-Plast. After Prof. Dr. W. Weber. In one piece. On a stand with a base with explanatory note. Height: 31 cm., width: 26 cm., depth: 20 cm., weight: 900 g.

### BoS 14/5-A · MALE FERN, SPORE FORMATION

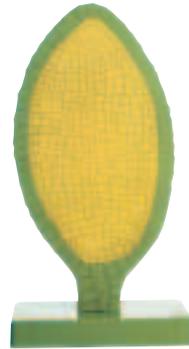
*Dryopteris filix-mas*, enlarged approximately 550 times (Sporangium) / 850 times (Spore tetrad and germinating), in SOMSO-Plast. After Prof. Dr. W. Weber. Supplied on a stand with explanatory note on the base and in one piece. Height: 30 cm., width: 18.5 cm., depth: 19 cm., weight: 950 g.

### BoS 14/4-A · COMMON HORSETAIL

*Equisetum arvense*, fertile shoot approx. 6 x life size, sporophyll with sporangia approx. 50 x life size, vegetative shoot approx. 3 x life size, in SOMSO-Plast. After Prof. Dr. W. Weber. In one piece. On a stand with base and explanatory note. Height: 35 cm., width: 33 cm., depth: 15 cm., weight: 1 kg.

### BoS 14/4 · HORSETAIL

*Equisetum arvense*, Sporophyll with sporangium enlarged approx. 50 times, spore with unrolled and rolled up spore bands enlarged approx. 500 times, in SOMSO-Plast. After Prof. Dr. W. Weber. In one piece. On a stand with base. H.: 30 cm., w.: 33 cm., d.: 15 cm., w.: 800 g.



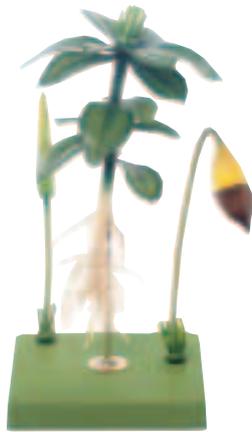
BoS 14/2



BoS 14/3



BoS 14/3-A



BoS 14/6

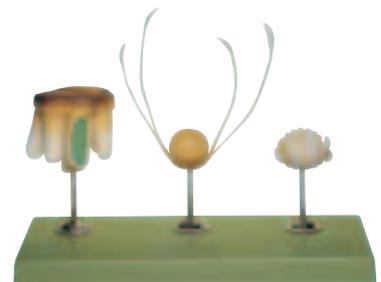


BoS 14/5



BoS 14/4-A

BoS 14/5-A



BoS 14/4

## MONOCOTYLEDONOUS PLANTS

### BoS 15/5 · EAR OF RYE

*Secale cereale*, enlarged approx. 25 times, in SOMSO-Plast. After Prof. Dr. W. Jung and Prof. Dr. W. Weber. Separates into 4 parts. On a stand with base and explanatory note. Height: 93 cm., width: 35 cm., depth: 18 cm., weight: 800 g.

### BoS 15/2 · GARDEN-TULIP, FLOWER

*Tulipa gesneriana*, enlarged approx. 4 times, in SOMSO-Plast. After Prof. Dr. W. Jung and Prof. Dr. W. Weber. Separates into 3 parts. On a base with explanatory note. Height: 42 cm., width: 18 cm., depth: 18 cm., weight: 1 kg.

### BoS 15/3 · TULIP BULB

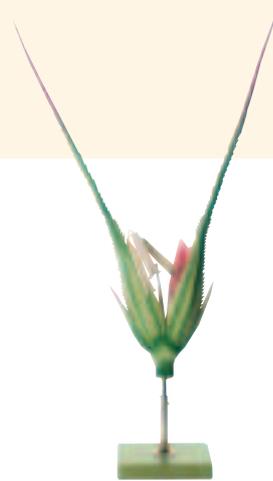
*Tulipa gesneriana*, enlarged approx. 5 times, in SOMSO-Plast. After Prof. Dr. W. Weber. Separates into 3 parts. On a base with key. Height: 31 cm., width: 18 cm., depth: 18 cm., weight: 680 g.

### BoS 18 · MODEL OF A CROSS-SECTION OF A WHEAT-GRAIN AS AN EXAMPLE OF A CARYOPSIS

*Triticum aestivum* L., enlarged approx. 75 times, in SOMSO-Plast. After Prof. Dr. W. Jung. Separates into 2 parts, on a stand with base. Height: 43 cm., width: 52 cm., depth: 26 cm., weight: 4.2 kg.



BoS 15/3



BoS 15/5



BoS 18



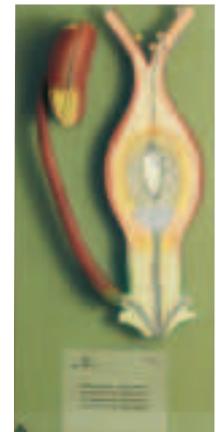
BoS 15/2



BoS 15/30



BoS 15/31



BoS 19

## FERTILIZATION AND GERMINATION - GYMNOSPERMOUS PLANTS

### BoS 15/30 · SCOTCH PINE, MALE

*Pinus silvestris*, flower enlarged approx. 18 times, stamen enlarged approx. 90 times, in SOMSO-Plast. After Prof. Dr. W. Weber. In one piece. On a stand with base with explanatory note. Height: 25 cm., width: 24 cm., depth: 12 cm., weight: 800 g.

### BoS 15/31 · SCOTCH PINE, FEMALE

*Pinus silvestris*, inflorescence enlarged approx. 20 times, seed scale with seed arrangements and covering scale enlarged approx. 80 times, in SOMSO-Plast. After Prof. Dr. W. Weber. Upper part removable. On a stand with base with explanatory note. Height: 26 cm., width: 25 cm., depth: 13 cm., weight: 1 kg.

### BoS 19 · FERTILISATION OF THE ANGIOSPERM

*Polygonum*-type, enlarged 300 times, in SOMSO-Plast. After Prof. Dr. W. Jung. On a base with explanatory key. In one piece. Height: 66 cm., width: 30 cm., depth: 14 cm., weight: 3.3 kg.

### BoS 15/7 · MODEL SHOWING GERMINATION

A collection for comparing the germination of rye (10 times enlarged), bean (5 times enlarged), and fir (20 times enlarged). In SOMSO-Plast. After Prof. Dr. W. Jung and Prof. Dr. W. Weber. Separates into 8 parts. On a base. Height: 37 cm., width: 54 cm., depth: 14 cm., weight: 3.7 kg.



BoS 15/7

## DICOTYLEDONOUS PLANTS

### BoS 1 · APPLE BLOSSOM

*Pirus malus*, modelled from nature, enlarged approx. 10 times, in SOMSO-Plast. After Prof. Dr. W. Jung. Separates into 6 parts. Height: 41 cm., width: 48 cm., depth: 45 cm., weight: 1.8 kg.



BoS 1

### BoS 2 · APPLE BLOSSOM - NODES IN CROSS SECTION

*Pirus malus*, enlarged approx. 10 times, in SOMSO-Plast. After Prof. Dr. W. Jung. In one piece. Height: 19 cm., width: 18 cm., depth: 18 cm., weight: 370 g.



BoS 2



BoS 3

### BoS 3 · APPLE BLOSSOM - NODES IN LONGITUDINAL SECTION

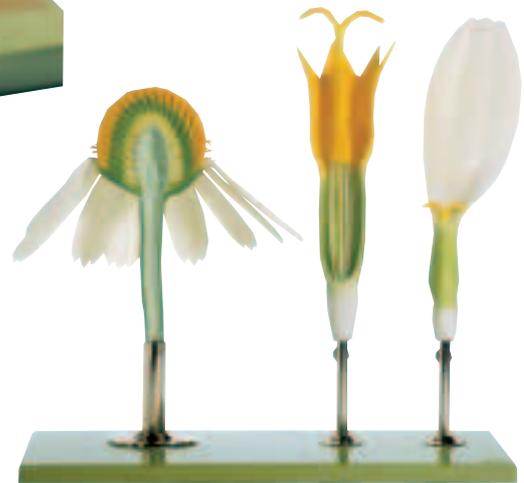
*Pirus malus*, enlarged approx. 10 times, in SOMSO-Plast. After Prof. Dr. W. Jung. In one piece. Height: 40 cm., width: 18 cm., depth: 18 cm., weight: 620 g.



BoS 15/1

### BoS 15/1 · SALVIA PRATENSIS, FLOWER

Enlarged approx. 15 times, in SOMSO-Plast. After Prof. Dr. W. Jung and Prof. Dr. W. Weber. The mechanism of the stamens can be shown. In one piece, on a stand with base. Height: 36 cm., width: 33 cm., depth: 18 cm., weight: 700 g.



BoS 15/6

### BoS 15/6 · REAL CAMOMILE

*Matricaria chamomilla*, inflorescence (composite), enlarged approx. 9 times, in SOMSO-Plast. Ligulate flower 20 x magnification, tubular flower 80 x magnification. After Prof. Dr. W. Weber. In one piece. On a stand with base. Height: 33 cm., width: 38 cm., depth: 12 cm., weight: 800 g.



BoS 15/15



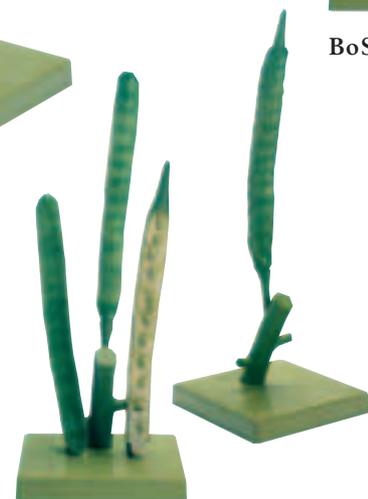
BoS 15/16

### BoS 15/19 · DANDELION, INFLORESCENCE, INDIVIDUAL BLOSSOM AND FRUIT

*Taraxacum officinale*, enlarged approx. 8 times and 16 times, made in SOMSO-Plast. After Prof. Dr. W. Weber. The individual flower and fruit can be removed from the base. Height: 35 cm., width: 33 cm., depth: 18 cm., weight: 1.1 kg.



BoS 15/4



BoS 15/12

**BoS 15/11 · RAPE, FLOWER**

*Brassica napus*, enlarged approx. 10 times, in SOMSO-Plast. After Prof. Dr. W. Weber. Separates into 2 parts, on a stand with base. Height: 34 cm., width: 28 cm., depth: 28 cm., weight: 700 g.



**BoS 15/9**

**BoS 15/12 · RAPE POD**

*Brassica napus*, enlarged approx. 8 times, made in SOMSO-Plast. After Prof. Dr. W. Weber. Separates into 4 parts. On a base. Height: 51 cm., width: 18 cm., depth: 18 cm., weight: 600 g.

**BoS 15/15 · PEA, FLOWER**

*Pisum sativum*, enlarged approx. 9 times, in SOMSO-Plast. After Prof. Dr. W. Weber. Separates into 3 parts. On a stand with base. Height: 40 cm., width: 23 cm., depth: 26 cm., weight: 850 g.

**BoS 15/16 · PEA, POD**

*Pisum sativum*, enlarged approx. 8 times, in SOMSO-Plast. After Prof. Dr. W. Weber. Separates into 3 parts. On stand with base. Height: 47 cm., width: 21 cm., depth: 18 cm., weight: 800 g.

**BoS 15/21 · CULTIVATED CHERRY, FLOWER**

Sweet cherry, *Prunus avium*, enlarged approx. 9 times, in SOMSO-Plast. After Prof. Dr. W. Weber. Separates into 3 parts, on a stand with base. Height: 33 cm., width: 31 cm., depth: 31 cm., weight: 800 g.

**BoS 15/4 · SCENTED PRIMROSE**

*Primula officinalis* (cowslip), in SOMSO-Plast. After Prof. Dr. W. Weber. Median cut through two heterostyled scented primrose flowers, enlarged approx. 13 times. In one piece, on a stand. Height: 42 cm., width: 33 cm., depth: 12 cm., weight: 1 kg.

**BoS 15/8 · FLOWER OF THE GRAPE VINE**

*Vitis vinifera*, enlarged approx. 50 times, in SOMSO-Plast. After Prof. Dr. W. Weber. Separates into 3 parts. On a stand with base. Height: 33 cm., width: 18 cm., depth: 18 cm., weight: 900 g.

**BoS 15/9 · POTATO FLOWER**

*Solanum tuberosum*, enlarged approx. 10 times, in SOMSO-Plast, after Prof. Dr. W. Weber. Separates into 3 parts. On a stand with base. Height: 39 cm., width: 24 cm., depth: 29 cm., weight: 1 kg.

**BoS 15/10 · EXAMPLE OF "FREE" PERIANTH LOBED ANGIOSPERM BLOSSOM**

Enlarged approx. 10 times, in SOMSO-Plast. After Prof. Dr. W. Jung Separates into 11 parts. On a base with explanatory note. Height: 54 cm., width: 39 cm., depth: 37 cm., weight: 2.4 kg.

**BoS 15/14 · FLOWER OF WILLOW, MALE AND FEMALE**

enlarged approx. 80 times, in SOMSO-Plast. After Prof. Dr. W. Weber. In one piece. On a stand with base. Height: 35 cm., width: 33 cm., depth: 15 cm., weight: 1 kg.

**BoS 15/20 · BUTTERCUP, FLOWER AND FRUIT**

Tall buttercup, *Ranunculus acer*, flower enlarged approx. 10 times, fruit enlarged approx. 20 times, in SOMSO-Plast. After Prof. Dr. W. Weber. In one piece. Flower: Height: 34 cm., width: 26 cm., depth: 26 cm., weight: 700 g. Fruit: Height: 30 cm., width: 18 cm., depth: 18 cm., weight: 600 g. Can be delivered as single models BoS 15/20-A, flower and BoS 15/20-B, fruit.

**BoS 15/33 · FRUIT OF THE CACAO TREE**

*Theobroma cacao*. Natural size. Made of SOMSO-Plast. According to Prof. Dr. W. Weber. Dismantable in 7 parts. Height: 30 cm., width: 17,5 cm., depth: 17,5 cm., weight: 2 kg.



**BoS 15/21**

**BoS 15/14**

**BoS 15/10**



**BoS 15/19**



**BoS 15/8**



**BoS 15/20-A**



**BoS 15/20-B**



**BoS 15/11**



**BoS 15/33**

## PLANT CELL

### BoS 16 · PLANT CELL

Enlarged 3000 times, in SOMSO-Plast. After Prof. Dr. W. Jung. Showing the microscopic structure. In one piece. On a base. Height: 19 cm., width: 32 cm., depth: 7 cm., weight: 700 g.

### BoS 16/1 · PLANT CELL

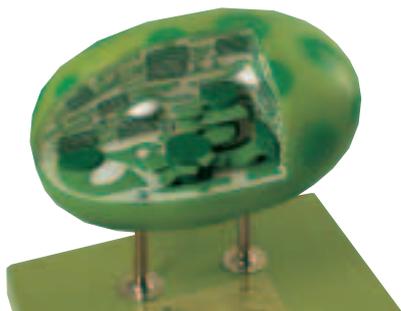
After Prof. Dr. W. Weber. Enlarged approximately 6000 times, made in transparent special plastic material. In one piece. Height: 36 cm., width: 31 cm., depth: 27 cm., weight: 1.7 kg.

### BoS 16/2 · CHLOROPLAST OF HIGHER PLANT

After Prof. Dr. W. Weber. Enlarged approximately 60,000 times, in SOMSO-Plast. Separates into 2 parts. On stand with base. Height: 38 cm., width: 39 cm., depth: 26 cm., weight: 3.2 kg.



BoS 16/1

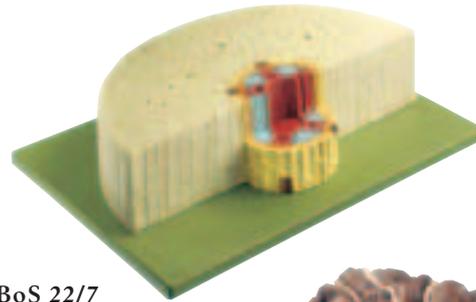


BoS 16/2

## PLANT MORPHOLOGY

### BoS 22/7 · ROOT OF SHALLOT BULB

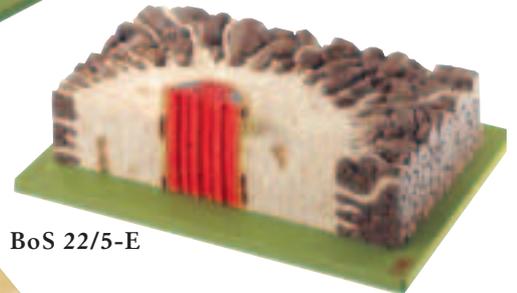
*Allium ascalonicum*, sectional model, enlarged approx. 350 times, in SOMSO-Plast. After Prof. Dr. W. Weber. In one piece, on a base with key. Height: 10.5 cm., width: 39 cm., depth: 28 cm., weight: 1.8 kg.



BoS 22/7

### BoS 22/5-E · YOUNG ROOT OF THE BUTTERCUP

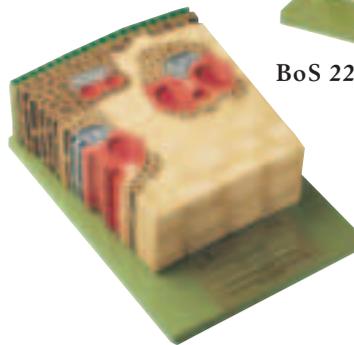
*ranunculus acer*. Sectional model, enlarged approximately 300 times, in SOMSO-Plast. A per Prof. Dr. W. Jung and overworked by Prof. Dr. W. Weber. In one piece, on a base. Height: 13 cm., width: 39,5 cm., depth: 28 cm., weight: 2.3 kg.



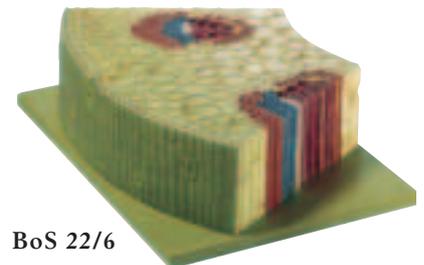
BoS 22/5-E

### BoS 21 · ANATOMICAL STRUCTURE OF PINE-WOOD

*Pinus silvestris*, enlarged approx. 350 times, in SOMSO-Plast. After Prof. Dr. W. Jung. In one piece, on base with explanatory key. Height: 15 cm., width: 65 cm., depth: 30 cm., weight: 5.2 kg.



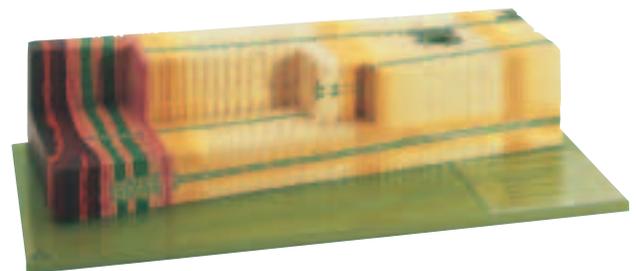
BoS 22/3



BoS 22/6

### BoS 21/1 · SECTION THROUGH A TWO YEAR OLD TWIG OF THE LIME-TREE

*Tilia sp.*, enlarged 350 times, in SOMSO-Plast. After models and drawing by Prof. Dr. W. Jung. In one piece, on a base. Height: 18 cm., width: 65 cm., depth: 30 cm., weight: 4.2 kg.



BoS 21



BoS 16

**BoS 22/3 · SECTION THROUGH THE PERIPHERAL PART OF A MONOCOTYLE STEM**

Maize, *Zea mays*, enlarged approx. 550 times, in SOMSO-Plast. After Prof. Dr. W. Jung. In one piece, on a base plate with explanatory key. Height: 49 cm., width: 30 cm., depth: 12 cm., weight: 2.8 kg.

**BoS 22/6 · CROSS-SECTION THROUGH THE PERIPHERAL SECTION OF A STEM (CAULIS)**

Enlarged approximately 450 times, in SOMSO-Plast. After Prof. Dr. W. Weber. In one piece, on a base. Height: 49 cm., width: 30 cm., depth: 12 cm., weight: 2.8 kg.

**BoS 22/4-E · SECTION THROUGH THE STEM OF A YEAR OLD DICOTYLE PLANT**

Lime-tree, *Tilia sp.*, somewhat simplified, enlarged approx. 125 times, in SOMSO-Plast. After Prof. Dr. W. Jung. On a base with explanatory key. In one piece. Height: 20 cm., width: 37 cm., depth: 25 cm., weight: 2.8 kg.

**BoS 22 · OPEN COLLATERAL CONDUCTING BUNDLE OF A DICOTYLE PLANT**

Enlarged approx. 550 times, in SOMSO-Plast. After Prof. Dr. W. Jung. In one piece, on a base with explanatory note. Height: 13 cm., width: 32 cm., depth: 26 cm., weight: 1.4 kg.

**BoS 17 · DECIDUOUS LEAF**

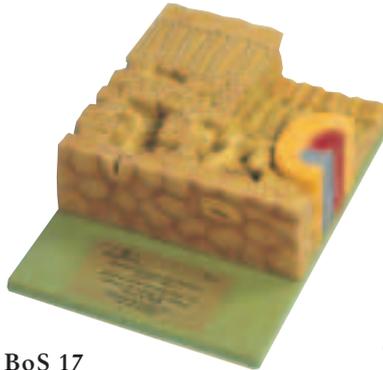
Enlarged 700 times, in SOMSO-Plast. After Prof. Dr. W. Weber. Transverse and longitudinal sections showing the microscopic formation. In one piece. On a base plate. Height: 41 cm., width: 29 cm., depth: 12 cm., weight: 2.8 kg.

**BoS 17/1 · SECTION THROUGH THE LEAF OF THE HELLEBORUS**

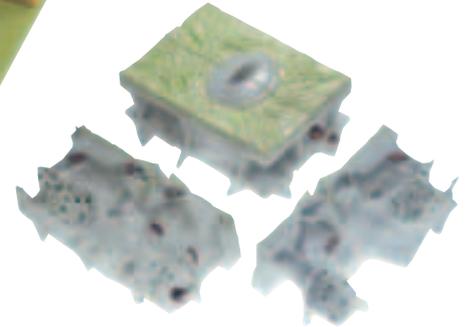
Enlarged 700 times, in SOMSO-Plast. After Prof. Dr. W. Weber. In one piece, on a stand with base and explanatory key. Height: 40 cm., width: 39 cm., depth: 26 cm., weight: 3.4 kg.

**BoS 17/2 · STOMATE OF THE UNDERSIDE OF A CHRISTMAS ROSE LEAF**

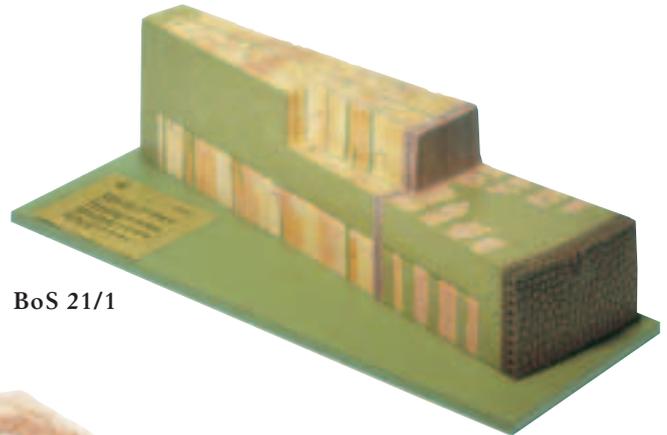
*Helleborus niger*, many times enlarged, in SOMSO-Plast. After Dr. Gerlach, Botanical Institute Erlangen. Separates into 2 parts. Height: 23 cm., width: 45 cm., depth: 37 cm., weight: 6.6 kg.



BoS 17



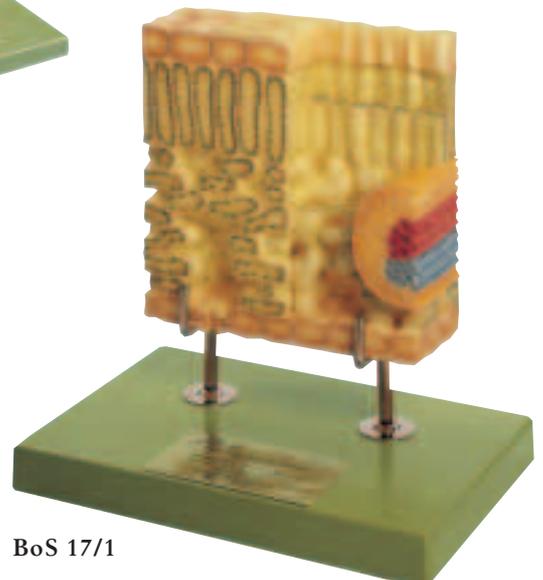
BoS 17/2



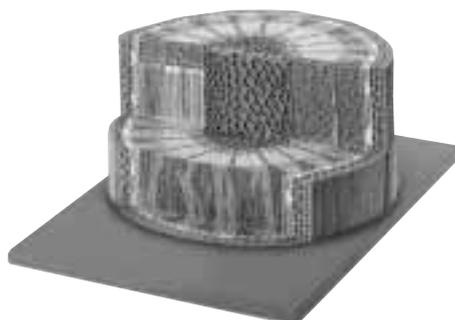
BoS 21/1



BoS 22



BoS 17/1

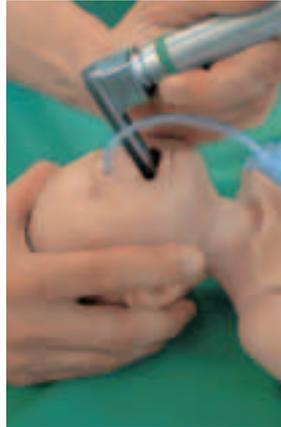


BoS 22/4-E  
(in preparation)

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