



MISSIONS TO HABITABLE WORLDS

Meeting organized by COST TD 1308 action and MTA CSFK
Budapest, 28 October, 2015

Opening talk by **László Szarka**
Head of Department for Research Institutions,
MTA Secretariat

Hungarian Academy of Sciences (MTA or „H.A.S.”)



MTA's dual mission:

- The Learned Society
- MTA Research Network



MTA Public Body („Learned Society”)

appr. 15 thousand members, including 3000
MTA doctors and 365 academicians

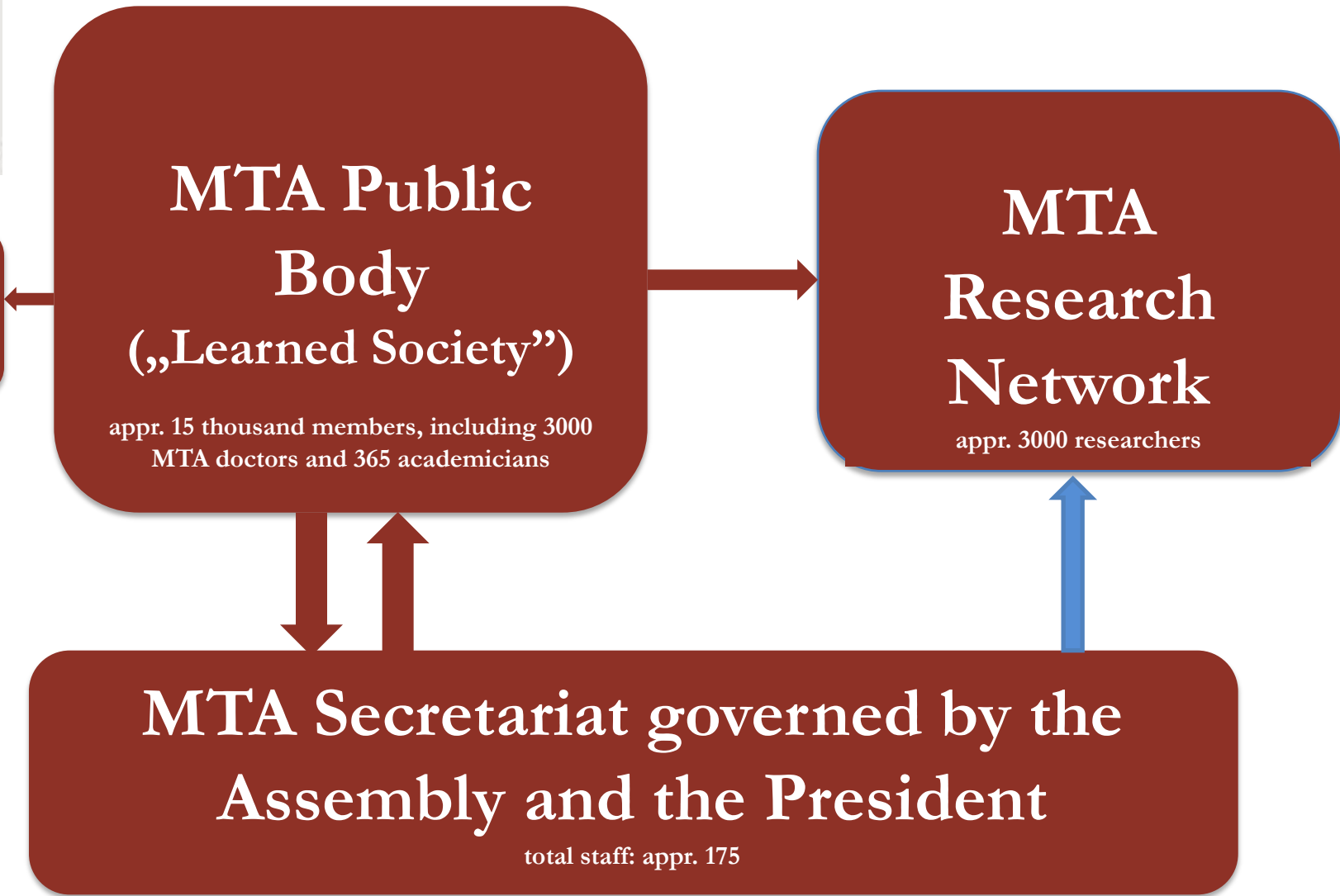
Library and
Information
Centre, etc.

MTA Research Network

appr. 3000 researchers

MTA Secretariat governed by the Assembly and the President

total staff: appr. 175





THE MTA RESEARCH NETWORK IN 2015

The only research network dedicated to discovery research in Hungary

RESEARCH INSTITUTE NETWORK

- 10 RESEARCH CENTRES
- 5 RESEARCH INST.

Since 2009, 62 Lendület („Momentum”) RG-s were founded in the institute network (57 are still active)

15 units, 2500 researchers

RESEARCH GROUP NETWORK

- „ACADEMY” RESEARCH GROUPS AT UNIVERSITIES AND OTHER PUBLIC INSTITUTIONS: 89

- LENDÜLET „MOMENTUM” RG-S AT UNIVERSITIES: 47

137 groups, 500 researchers



Research centres and research institutes of the Hungarian Academy of Sciences

The „new” (2012-) structure: a dozen strategic priorities

enabled research staff, premises

**ASTRONOMY AND
EARTH SCIENCES**

Sopron, Budapest

125

NATURAL SCIENCES

Budapest

320

HUMANITIES AND ARTS

Budapest

310

ECOLOGY

Tihany, Vácraátót, Budapest

90

ENERGY SCIENCE

Budapest

180

SOCIAL SCIENCES

Budapest

155

AGRICULTURE

Martonvásár, Budapest

90

„WIGNER” PHYSICS

Budapest

250

**ECONOMY AND
REGIONAL STUDIES**

Pécs, Budapest

145

BIOLOGY

Szeged

225

NUCLEAR RESEARCH

Debrecen

105

LINGUISTICS

Budapest

95

BRAIN RESEARCH

Budapest

80

MATHEMATICS

Budapest

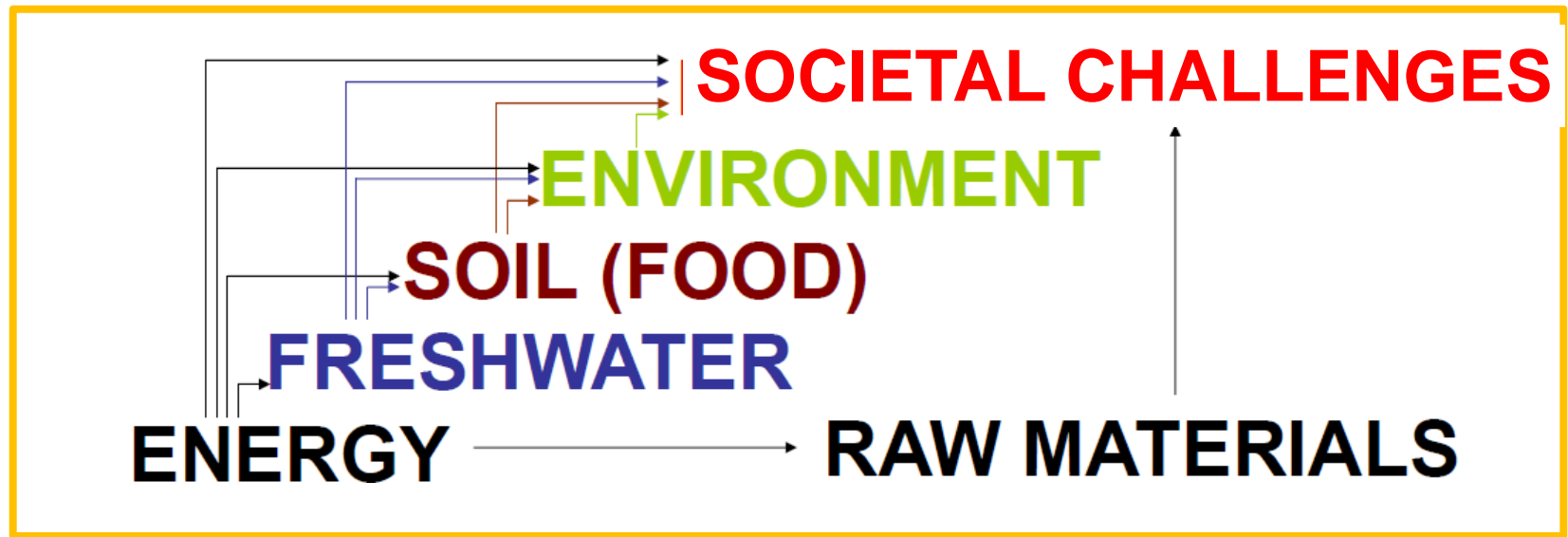
80

INFORMATICS

Budapest

140

Summary of natural and societal challenges: International Year of Planet earth
(Szarka&Brezsnyánszky 2009, Szarka 2014)



GEO-BIO EARTH SYSTEM

In the order of importance by Richard Smalley
(2003, <https://smalley.rice.edu/content.aspx?id=246>):

1. energy
2. drinking water
3. soil
4. environment
5. poverty
6. terrorism&war
7. disease
8. education
9. democracy
10. population



**From a perspective of a geophysicist
in this situation it is absolutely relevant to deal with**

Missions to Habitable Worlds,

**among others,
in order to understand how our Planet Earth
can be kept habitable.**



Allegory of the Academy

Painting by Johann Ender in 1831.

A gift of István SZÉCHENYI to the Academy.

It shows his wife, Crescence SEILERN.

„Post nebula Phoebus” (Lat)

„Borúra derű” (Hun)

„After a storm comes a calm” (Eng)

