

PRELIMINARY AGENDA

Grand Challenges Scholars Program Workshop:

August 5-7, 2019

(Official Languages: Portuguese/English, Simultaneous Translation available)

Day 0 - August 5, 2019

14:00h Registration Open

16:00h Afternoon - GCSP Brazil

Welcome and Opening Remarks.

Sandra Goulart, Rector, Universidade Federal de Minas Gerais - UFMG

Francis Bogossian, President, Academia Nacional de Engenharia - ANE

Luiz Davidovitch, President, Academia Brasileira de Ciências - ABC

João Luiz Filgueiras de Azevedo (President) Conselho Nacional de Desenvolvimento Científico e Tecnológico- CNP,

Evaldo Vilela, President, Fundação de Amparo a Pesquisa do Estado de Minas Gerais – FAPEMIG

Cícero Murta Diniz Starling, Dean, School of Engineering, Universidade Federal de Minas Gerais - UFMG

Virginia Ciminelli, Chair, Grand Challenges Scholar Program Workshop – Brasil, and Professor, Universidade Federal de Minas Gerais - UFMG

17:00h Guest speaker: Paulo Artaxo (Universidade de São Paulo - USP):

The Role of Science and Engineering in Climate Change and on the Implementation of the Sustainable Development Goals

17:30h Guest speaker: B.L. Ramakrishna (NAE GCSP Network Office):

Engineering: The enabling Discipline for the 21st Century

18:00h Welcome Reception

Day 1- August 6, 2019

8:00h Registration Open

9:00h Welcome and Opening Remarks

Organizing Committee and the three Academies

9:30h Keynote Address

Moderator

Francis Bogossian
President, *Academia Nacional de Engenharia*

The NAE's Grand Challenges for Engineering and the GCSP

Richard Miller
President, *Franklin W. Olin College of Engineering*

10:10am Q&A

Coffee-Break – 10:30-11:00h

11:00h Successful Implementation of GCSP

Moderator

Edson Watanabe
Director COPPE/Universidade Federal do Rio de Janeiro

Rapporteur

Nelson Martins
Co-chair, GCSP Brazil
Electrical Energy Research Center - CEPEL

11:10h GCSP Competencies

Rama Ramakrishna
Director, NAE GCSP Network Office
U.S. National Academy of Engineering

11:30h Fulfilling GCSP Competencies: Exemplars

Lueny Morell
Vice Dean of the School of General Engineering
Beihang University

11: 50h Q&A

12:30- 14:00h – Lunch

14:00h Panel: GCSP fostering modern global engineer competencies including entrepreneurship

Moderator

José Roberto Boisson de Marca
Co-chair, GCSP Brazil
Pontificia Universidade Católica- PUC/Rio

Rapporteur

Mario Neto Borges
Former President, Fundação de Amparo a Pesquisa do Estado de Minas Gerais - FAPEMIG and
Conselho Nacional de Desenvolvimento Científico e Tecnológico - CNPq
Universidade Federal de São João Del Rei – UFSJ

Panelists (14:10 – 15:00h)

Alessandro Moreira
Vice-president
Universidade Federal de Minas Gerais - UFMG

Mauricio Guedes
Director
Fundação de Amparo à Pesquisa do Estado do Rio de Janeiro – FAPERJ

Alvaro Prata
Former National Secretary of Innovation and Professor
Universidade Federal de Santa Catarina – UFSC

15:00h Q&A

15:30- 16:00h – coffee-break

16:00h Brainstorming session: Making the Challenges pertinent to Brazil.

Moderator

Evaldo Vilela
President,
Fundação de Amparo a Pesquisa ao Estado de Minas Gerais – FAPEMIG

Rapporteur

Ivan Marques de Toledo Camargo
Former President,
Universidade de Brasília – UnB

Panelists (16:10 – 17:00h)

Jorge Guimaraes

President,

Empresa Brasileira de Pesquisa e Inovação Industrial - EMBRAPPII

Helio Waldman

Former president, *Universidade Federal do ABC*

Universidade de Campinas - UNICAMP

Tatiana Dumêt

Dean, School of Engineering

Universidade Federal da Bahia – UFBA

17:00h - Q&A

17:30h Summary – Day 1

Day 2- August 7, 2019

8:30h Panel: The Value of GCSP to Employers

Moderator

Al Bunshaft

Vice President,

Dassault Systems

Panelists (9:00- 10:00h)

André Gasparotti

Director, Technology Development

Embraer/Boeing Brasil Comercial

Camila Dias de Miranda Ribeiro

General Manager, Human Resources & Communication

Nexa Resources

João Irineu Medeiros Neto,
Director, Regulatory Affairs
Fiat-Chrysler Automobiles

Ricardo Valadares Gontijo,
Founding and Board Chairman
Direcional Engenharia

10:00h - Q&A

Coffee-Break – 10:30-11:00h

**11:00h Panel: The GCSP and other International Collaboration Experiences:
Perspectives of students and recent graduates**

Moderator

*Richard Magdalena Stephan
Universidade Federal do Rio de Janeiro - COPPE/UFRJ*

Rapporteur

*Luiz Machado
Co-chair, GCSP Brazil
Vice-Dean, School of Engineering,
Universidade Federal de Minas Gerais-UFMG*

Panelists (11:00- 12:00h)

*Siena Applebaum
Rising Senior, Mechanical Engineering
University of Southern California – USC*

*Barbara Rosado
Ph.D. Candidate in Electrical Engineering
Universidade Estadual de Campinas – UNICAMP*

*José Oniram Vilaverde
Ph.D. Candidate in Mechatronics Systems
Universidade de Brasília – UNB, IEEE Brasil*

Bruno Gomes Angelo,
Senior, Major in Mechanical Engineering
Universidade Federal de Minas Gerais – UFMG

12:00h - Q&A

12:30-13:30h Lunch

13:30h Brainstorming Session: Implementing GCSP in Brazil

Moderator

Ronaldo Tadeu Pena
Former President and Emeritus Professor
Universidade Federal de Minas Gerais – UFMG

Rapporteur

Vilma Alves de Oliveira
University of São Paulo - São Carlos
President, Brazilian Society of Automation - SBA

Panelists (13:30- 14:30h)

Valder Steffen Jr.
President
Universidade Federal de Uberlândia

José Roberto Cardoso
Former Dean and Professor
Escola Politécnica
Universidade de São Paulo

Valquíria Villas Boas Gomes Missell
Universidade de Caxias do Sul - UCS
Academic Director
Brazilian Association of Engineering Education – ABENGE

Flávio Paulino de Andrade e Silva
Executive Project Manager
MRV Engenharia e Participações S.A

14:30 - Q&A

15:00- 15:30h – coffee-break

15:30h The Elements of a Successful GCSP Program

Moderator

Rama Ramakrishna -
Director, NAE GCSP Network Office
U.S. National Academy of Engineering

Panelists

Cathy Leslie
Executive Director, Engineers Without Borders-EWB
President, EWB International

Lueny Morell
Vice Dean of the School of General Engineering
Beihang University

16:00 –17:00h Working Session: Wrap-up and Next Steps

Rapporteurs and Organizing Committee

Day 3- August 8, 2019

Morning

Extra Activity for Institutions (with prior sign-up) Preparing a GCSP Proposal aligned with each Institution's goals

Rama Ramakrishna
Director, NAE GCSP Network Office
U.S. National Academy of Engineering

Lueny Morell
Vice Dean of the School of General Engineering
Beihang University

Cathy Leslie
Executive Director, Engineers Without Borders-EWB
President, EWB International

Working session for Brazilian Universities and Institutions for preparing the proposal to join the GCSP

