How To Build Global Academic Linkages and Collaboration

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Director, Virginia Tech Advanced Research Inst., USA
President, IEEE Power & Energy Society, 2018-2019

Voice of Industry, Global Industry Development Forum, Shenzhen,02 August, 2021

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Global Academic Linkage and Collaboration

Why is it important?

Good Science Anywhere is

Good for Science Everywhere

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IEEE is a Global Organization

60% of IEEE members come from outside USA

ASME SETTING THE STANDARD

IEEE Advancing Technology for Humanity

ASCE AMERICAN SOCIETY OF CIVIL ENGINEERS

AIAA SHAPING THE FUTURE OF AEROSPACE

AIChE The Global Home of Chemical Engineers

ANS American Nuclear Society

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[redacted]

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IEEE Advancing Technology for Humanity

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A 2020 Snapshot

IEEE Xplore® Digital Library

5,000,000+
Total Documents

192,262,982 Total Usage*

222,035
New Conference Articles

396,007
Total Members
Top 5 Countries for Members

160,298 UNITED STATES | 45,353 INDIA | 30,106 CHINA | 15,106 CANADA | 13,798 JAPAN

107,618
Student Members
Top 5 Countries for Student Members

29,244 INDIA | 20,756 UNITED STATES | 12,243 CHINA | 3,138 CANADA | 2,915 TUNISIA

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86,052
New Journal and Magazine Articles

138
Standards Approved for Publication

Ten Regions Worldwide

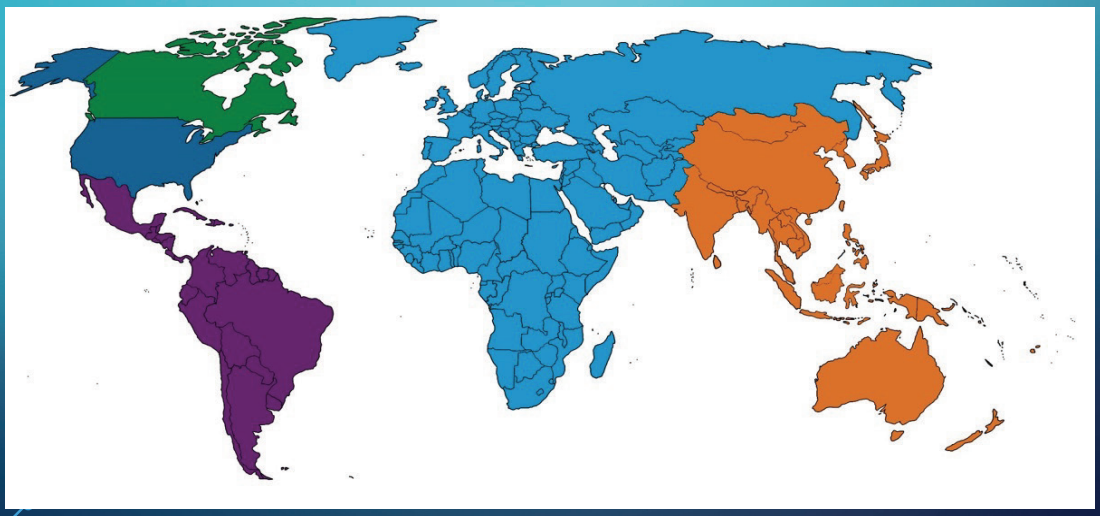
Sections	Student Branches	Chapters
342	3,485	2,562

1,611
IEEE Sponsored Conferences in 96 Countries

465,000+
Conference Attendees
Virtual and In-Person

6

10 Regions of IEEE



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Advancing Industry/Government Participation Globally

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ICT Related Work in IEEE

- IEEE Communications Society
- IEEE Computational Intelligence Society
- IEEE Microwave Theory & Techniques Society
- IEEE Signal Processing Society

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Collaboration with Industry: Challenges and Coping Strategies

- Alignment with Industry
- Standards Development
- IEEE Corporate Engagement Program
- Industry Participation in IEEE Conferences

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IEEE Industry MoUs

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IEEE PES Global Conferences

IEEE PES APPEEC
IEEE PES Asia-Pacific Power & Energy Engineering Conference 2019
Macao, China

2019 IEEE PES GENERAL MEETING
4-8 AUGUST
ATLANTA, GA USA

The 3rd IEEE Conference on Energy Internet and Energy System Integration
Changsha, China

IEEE PES & IAS POWERAFRICA CONFERENCE
2019 PowerAfrica Conference
Abuja, Nigeria • 20-23 August 2019

IEEE PES 2019 GTD CONFERENCE & EXPOSITION
Thailand

IEEE International Forum SMART GRIDS for SMART CITIES
Belgium

IEEE Smart Cities
Morocco

iSPEC 2019
IEEE Sustainable Power & Energy Conference
Grid Modernization for Energy Revolution
Beijing, China

IEEE PES T&D CONFERENCE & EXPOSITION
Chicago, USA

Innovative Smart Grid Technologies 2019 ISGT North America
17-20 February 2019
Washington DC

Innovative Smart Grid Technologies 2019 ISGT Latin America

Innovative Smart Grid Technologies 2019 ISGT Europe

Innovative Smart Grid Technologies 2019 ISGT Asia

2019 IEEE PES Transactive Energy Systems Conference (TESC)
IEEE
July 8-10, 2019 – University of Minnesota, Minneapolis, MN

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Academic Exchanges and Publications in IEEE Platform

- Thousands and thousands of Chinese visiting scholars in US, Canada, Europe
- Joint publications in IEEE by Chinese and foreign authors
- Foreign academic participation in IEEE international conferences in China allows detailed exchange of ideas and laboratory experiences
- Chinese publications produced by Chinese Society of Electrical Engineers (CSEE) and State Grid Electric Power Research Institute (SG-EPRI) are hosted by IEEE

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Chinese Scholars/Experts In Paper Review Work

Chinese academics and industry engineers participate in IEEE paper reviews. In 2019 IEEE Publications took a position of not allowing IEEE reviewers from Huawei to review papers. I strongly objected, so that IEEE can maintain its neutrality in the scholarly publications process. These restrictions were later lifted.

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Chinese Universities and International Collaboration

- Tsinghua University sent over 100 students, faculty and researchers to IEEE Power & Energy Society Meeting in Atlanta in August 2019
- Workshops on specific topics at IEEE conferences for closer cooperation
- Some communication is possible without physical presence
- Outward communication from China should continue to be encouraged

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My Guest Professorships at Chinese Universities

- Tsinghua University (Beijing)
- Beijing Jiao Tong University
- Southeast University (Nanjing)
- Hohai University (Nanjing)
- Northeast Electric Power University (Jilin City)
- Guangxi University (Nanning)

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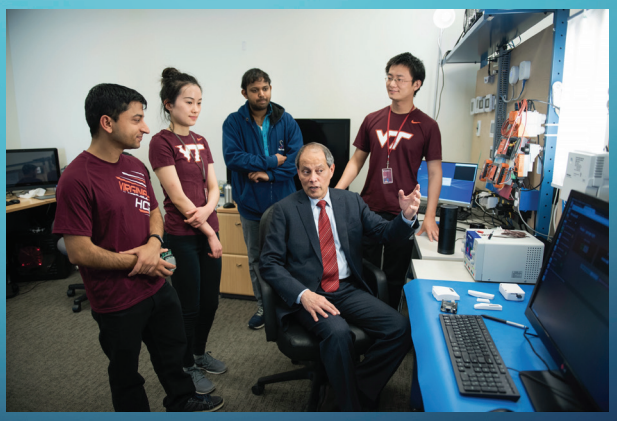
Virginia Tech Advanced Research Institute

ARI

VirginiaTech
Invent the Future



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How can IEEE help Strengthen Diversification and Globalization

Diversification

- Geographical
- Cultural
- Gender

Awareness and practice of this diversity helps with globalization

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PES Women in Power Program

Fostering a more diverse leadership by supporting the career advancement, networking and education of women in the energy industry

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A Typical Women in Power Event

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Participation in a Women in Power Event

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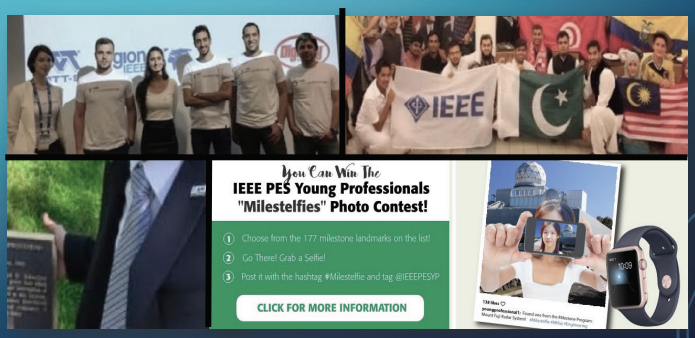
Mentoring Young Professionals

Helping young professionals evaluate their career goals, polish their professional image, and create the building blocks of a lifelong and diverse professional network

Over 4,000 PES Young Professionals worldwide, and growing!



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Brings together various IEEE's technical societies and organizations to advance the state of the art for smart city technologies for the benefit of society

Serves as a neutral broker of information amongst industry, academic, and government stakeholders.

- Smart Buildings
- Smart Living
- Smart Transportation
- Smart Energy
- Smart Communications
- Smart Networks
- Self-Aware Digital Hub
- Environmental Awareness

IEEE Smart Cities

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IEEE Annual Election

IEEE President-Elect

SAIFUR RAHMAN

Joseph R. Loring Professor of Electrical and Computer Engineering
Virginia Tech
Arlington, Virginia, USA
www.srahman.org

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http://www.saifurrahman.org/sr2022_cn/

赛义夫·拉赫曼

(通过请愿提名)

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SCAN ME

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IEEE 候任主席候选人

赛义夫·拉曼教授和中国的紧密联系

赛义夫
拉曼

自我 介绍

我是弗吉尼亚理工大学高级研究所的创始主任，同时也是大学电气和计算机工程学院的Joseph R. Loring教授。我曾担任IEEE电力与能源协会2018-2019年度的主席。同时，我也是 BEM Controls公司，一家提供建筑节能解决方案的软件公司的创始人。

IEEE

IEEE 终身会士和中国电机工程学会外籍会士

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Thank You

IEEE President Election

Prof. Saifur Rahman (s.rahman@ieee.org)

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16 August to 01 October 2021

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