

# IEEE 3<sup>rd</sup> Conference on Norbert Wiener in the 21<sup>st</sup> Century Being Human In a Global Village

📍 CEG Campus, Anna University, Chennai, INDIA.



<http://21stcenturywiener.org/>

IEEE Conference Number 48944



**Norbert Wiener in India**  
1953 - 1954 : 7 Weeks and 8 Institutions

## Keynote Speakers



**Prof Ashok Jhunjhunwala**  
Department of Electrical Engineering, IIT Madras.



**Dr Katina Michael**  
Director, Centre for Engineering, Policy and Society, Arizona State University, USA & Senior Editor - IEEE Consumer Electronic Magazine.



**Dr. Sergio Bittanti**  
Professor, Politecnico di Milano, Italy.



**Witold Pedrycz**  
Canada Research Chair  
IEEE Fellow, University of Alberta, Canada

## Featured Speakers



**Prof. Greg Adamson**  
Associate Professor and Enterprise, School of Computing and Information Systems, University of Melbourne, Parkville, VIC, Australia.



**Dr Heather Love**  
Assistant Professor, University of Waterloo, Canada.



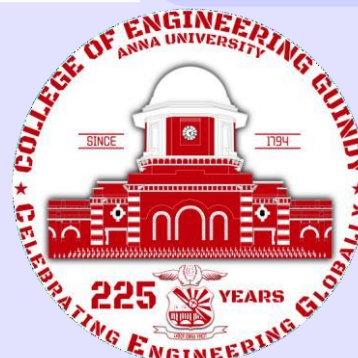
**Dr Laurie Lau**  
Chairman, APATAS, Hong Kong.



**Dr Michael Rigby**  
Faculty of Architecture, Building and Planning, Acting Deputy Director at the Australian Urban Research Infrastructure Network (AURIN), University of Melbourne, Australia.



**Dr. Sarbani Banerjee Belur** -  
Senior Project Research Scientist, Department of Electrical Engineering, IIT Bombay.



**Prof. T V Gopal**  
Conference Chair & Professor  
Department of Computer Science and Engineering  
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**Prof. Greg Adamson**  
Programme Chair &  
Associate Professor and Enterprise  
Fellow in Cyber Security  
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"As in the case of my earlier experiences in China and Mexico, so in my Indian trip my motive was more than restlessness or idle curiosity. More and more Indian authors are publishing in our scientific journals, and we need the Orient more and more to supplement a West which is showing the intellectual and moral enfeeblement following two World Wars." - Norbert Wiener, "I Am a Mathematician", MIT Press, Pp339, 15 August 1964

The phrase "**Global Village**" was coined by Canadian media theorist and philosopher Marshall McLuhan to describe how the propagation of media technologies creates an ever-more interconnected world. McLuhan was deeply influenced by the work of Norbert Wiener, a mathematician, technologist, and philosopher whose work in cybernetics brought ideas like "**complexity, computing, communications, and control**" to the quest for a General Systems Theory. Wiener's work offered a comprehensive blend of theory and practice spanning across the "Global Village," and this conference pays tribute to both the global dimension of his legacy and his ethical commitment to valorizing human freedom and autonomy within a society increasingly dominated by cybernetic systems.

**21CW2020: "Being Human in a Global Village"** is the third in a series of conferences initiated by the IEEE Society on Social Implications of Technology (SSIT), following events in Boston (2014) and Melbourne (2016). The 2020 event invites us to consider how we – as policy makers, parents, citizens, business owners, researchers, humans – need to be proactively preparing for a new world in light of the challenges coming our way in the form of artificial intelligence, or machine learning. For instance, young people need to be flexible and adaptable as the workplace in 20 years' time will be very different from today.

This conference will have three general themes:

- **The state of technologies initiated by Wiener.**
- **The social impact of those technologies.**
- **Wiener's 1950s engagement and travels in India.**

More specifically, we invite participants to consider how Wiener's work resonates with various contemporary interpretations of the concept "global village." For example, literary scholar Sue-Im's claims that it has come to designate "the dominant term for expressing a global coexistence altered by transnational commerce, migration, and culture," while Thomas Friedman defines of the global village as a world "**tied together into a single globalized marketplace and village.**"

Contemporary cybernetics began as an interdisciplinary study connecting the fields of control systems, electrical network theory, mechanical engineering, logic modeling, evolutionary biology, neuroscience, anthropology, and psychology in the 1940s, through the Macy Conferences. Studies in cybernetics provide a means for examining the design and function of any system, including social systems such as business management and organizational learning, achieving both effective and human functioning.

We invite innovative session proposals, and paper, student poster and practitioner submissions that consider Wiener's work from perspectives across applied, physical, and social sciences, as well as the humanities, fine arts, and professional/industry practice. The areas of interest for this conference include and not limited to:

- Evolution of Cybernetics
- Theories of Mind, Cognition and the Nervous System
- Information
- Feedback and Control Theory
- Norbert Wiener – The Person
- What Technology Wants
- Space – Wiener Crater on the Far Side of the Moon
- Ethics and Artificial Intelligence

#### Submissions might focus on:

- Architecture
- Artificial Intelligence
- Cognitive Computing in Theory and Practice
- Cybernetics – Science, Technology, Literature, Arts and Design
- Cyber-physical systems
- Cyber Security
- Cyber Warfare and Crime
- Cyborgs
- Egocentric Perception, Interaction and Computing
- Fuzzy Sets
- Game Theory
- Human Computer Interaction
- Information Ethics
- Information Theory
- Innovation and Economic Development
- Life Sciences
- Machine Learning
- Measurement Theory
- Organization Theory
- Perceptual Control Theory
- Psychology - Neuropsychology, Behavioral Psychology, Cognitive Psychology
- Philosophy
- Robotics and Industrial Automation
- Science and Technology Studies
- Science Fiction as Social Commentary
- Sociology
- Technology as a prosthetic device and human factor enhancer
- Uncertainty and Paradox

## Submission Guidelines

We invite the following types of submissions:

- Full papers for peer-review and publication in IEEE Xplore (must be original and not simultaneously submitted to another journal or conference; 2500-3500 words)
- Abstracts for paper or poster presentations *not* to be published in IEEE Xplore (250-350 words)
- Proposals for workshops, panels, roundtable discussions, or other innovative sessions related to the conference theme (please explain relevance to theme; 250-500 words)

Authors preparing full papers should consult IEEE conference templates for guidelines on composing and formatting conference papers. Please ensure that all template text is removed prior to submission: <https://www.ieee.org/conferences/publishing/templates.html>

**Submission Link:** <https://easychair.org/conferences/?conf=21cw2020>

### Important Dates

**31 December 2020:** Early call for peer-reviewed papers and abstract-only submissions, including papers, posters, panels, and roundtable discussions (decision by 31 January 2021)

**31 March 2021:** Regular call for peer-reviewed papers and abstract-only submissions (decision by 15 April 2021)

**31 May 2021:** Final submission of accepted peer-reviewed papers due, and last call for abstract-only submissions (decision by 15 June 2021)

#### Conference Chair:

Prof. T V Gopal, CEG Campus, Anna University, Chennai

#### Program Chair:

Prof. Greg Adamson, University of Melbourne, Australia

#### Finance Chair:

Mr. C R Sasi, Formerly Chairman, IEEE Madras Section

#### Planning Chair:

Prof. T Srinivas, Indian Institute of Science, Bengaluru

#### Publications and Communications Chair:

Dr. Heather Love, University of Waterloo, Canada

#### Organizing Chair:

Dr. E. Natarajan, Dean, CEG Campus, Anna University, Chennai

#### HOST Department:

Dr. S Valli, Head of the Department, DCSE, CEG Campus, Anna University, Chennai

Dr. T.V. Geetha, Formerly Dean, CEG Campus, Anna University, Chennai

### Call for Nominations: IEEE SSIT Norbert Wiener Award

This award for Social and Professional Responsibility is given to an individual or team for exceptional contribution, or outstanding career contribution in the field of the social implications of technology. Further information can be found at:

**To nominate an individual use this form:** <http://technologyand society.org/wp-content/uploads/NorbertWienerFORMindividual.docx>

**To nominate a team use this form:** <http://technologyandsociety.org/wp-content/uploads/NorbertWienerFORMteam.docx>

**Please send the nomination(s) to** Michael Cardinale <cardinal@ieee.org>.

## SPONSORSHIP SCHEMES

<b>Platinum Sponsor:</b>	<b>Rs. 2,00,000/- [Rupees Two Lakh Only]</b>	<b>15 Free Delegate Registrations</b>
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**Tax Exemption : Section 80 GGA of the Indian Income Tax Act**

## REGISTRATION FEES

<b>Professionals:</b>	<b>INR5,000</b>	<b>[USD75]</b>
<b>Faculty:</b>	<b>INR3,000</b>	<b>[USD45]</b>
<b>Students:</b>	<b>INR1,800</b>	<b>[USD25]</b>

INR10% Discount on the registration fee is extended to members of IEEE and Sister Professional Societies  
The Registration Fee includes the delegate kit, two coffee / tea breaks and lunch on all conference days and banquet dinner.

## BANK DETAILS

Sponsorship and Registration Fees can be transferred to the "CYBER PHYSICAL SYSTEMS" bank account by Internet Banking using NEFT/ RTGS facility using the account details given below.

**Name of the Account: CYBER PHYSICAL SYSTEMS**

**Account Number: 10496977848**

**Home Branch: State Bank of India, Anna University,  
Chennai - 600 025, India.**

**Type of account: Savings**

**NEFT / RTGS / IFSC Code: SBIN0006463**

**SWIFT: SBININBB291**

**MICR: 600002039**

## VENUE

The conference is a part of the 225 years celebrations of the College of Engineering, Guindy Campus, Anna University, Chennai and will be held in the Vivekananda Auditorium, the CEG TAG Auditorium and the Henry - Maudslay Hall located within this campus.

