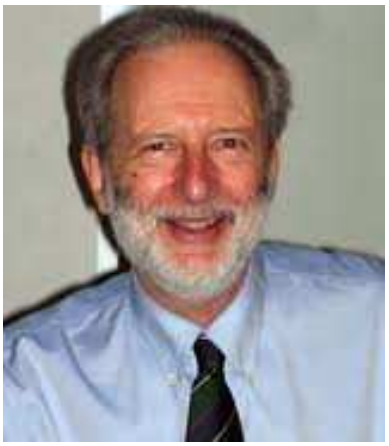
Speaker Biographies



Dr. Carl Mitcham is Professor of Liberal Arts and International Studies, Director of the Hennebach Program in the Humanities, and Co-Director of the Ethics Across Campus Program at the Colorado School of Mines. Publications include Thinking through Technology: The Path between Engineering and Philosophy (1994), Encyclopedia of Science, Technology, and Ethics (4 vols., 2005), Oxford Handbook of Interdisciplinarity (2010, with Robert Frodeman and Julie Thompson Klein), and Ethics and Science: An Introduction (2012, with Adam Briggle). Affiliate appointments: European Graduate School, Saas Fee, Switzerland; Center for Science and Technology Policy Research, University of Colorado Boulder; Consortium for Science, Policy, and Outcomes, Arizona State University; Center for the Study of Interdisciplinarity, University of North Texas; Faculty of Social Science and Humanities, Dalian University of Technology, China; and the Filosofía, Ciencia y Valores program, Universidad del País Vasco.

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Dr. Indira Nair retired from Carnegie Mellon University after 32 years. For the last 12 years there, she was the Vice Provost for Education and Professor in the Department of Engineering and Public Policy. She has designed and taught several interdisciplinary courses including ethics of science and technology, environmental science, technology and decision-making and radiation, health and policy. Her research has ranged over: risk assessment and communication, green design, bioelectromagnetics, education in general and pedagogies for the modern-day literacies such as scientific, environmental and global literacy.

Dr. Nair currently chairs the national Global Learning Leadership Council of the American Association of Colleges & Universities (AAC&U). She advises several universities and colleges on incorporating global and environmental literacy throughout the curriculum. She has served on numerous national committees including National Science Foundation's Committee on Equal Opportunities in Science and Engineering (CEOSE) and on the Division of Education and Human Resources Advisory Committee (EHR), the Educators Advisory Panel of the Government Accountability Office (GAO) and the Board of Student Pugwash USA. Locally, she has been involved in K-12 education and served as a member of the Board of the Pittsburgh Regional Center for Science Teachers, the School Reform Task Force of the Pittsburgh Public Schools, the group designing the Science and Technology High School, the founding Boards of two charter schools –City High and the Environmental Charter School at Frick Park, and on the Winchester Thurston Advisory Board. She is co-author of a book, Journeys of Women in Science and Engineering: No Universal Constants, (Temple University Press, 1997).

She was voted a Women of Distinction by the National Association of Women in Higher Education (NAWE) and the George Morgan Award for Creativity and Innovation in Interdisciplinary Education by Brown

University. She received the Doherty Prize for Excellence in Education in 1993, the Undergraduate Advising and Mentoring Award in 1994 and the Barbara Lazarus Award for Culture and Climate in 2005. She founded the Carnegie Mellon Chapter of Student Pugwash to encourage students to think about the social responsibility of science and technology. Her current quests and involvements include: a new scheme for general education including the new literacies; pedagogies for educating for innovation; increasing the inclusion of under-represented minorities across all segments of education; improving K-12 STEM education and bioelectromagnetics. She holds a Ph.D. in Physics from Northwestern University and a Pennsylvania teachers Certificate for high school science teaching.

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John Tharakan is a Professor at Howard University in the College of Engineering, Architecture and Computer Sciences, where he also directs the Graduate Studies program in the Department of Chemical Engineering. Before joining the faculty at Howard, he worked as a research scientist at the American Red Cross. His research interests and experience are in environmental engineering and biotechnology, appropriate technology development and education, and sustainable development, with specific focus on technologies for water treatment and conservation, renewable energy production using solar and biomass resources, waste management and recovery, as well as on ethics and philosophy of technology. As Faculty Adviser to Howard University's Engineers Without Borders student chapter, he has worked on appropriate water, sanitation and energy technology implementation in developing communities in Senegal and Kenya (http://www.howard.edu/Kenya). He has also served as Chair or Co-Chair of an on-going series of International Conferences on Appropriate Technology (2004 – 2012) that have been held across Africa bringing together academics, researchers, practitioners and community groups to facilitate knowledge and technology transfer for social justice (http://www.appropriatetech.net).

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