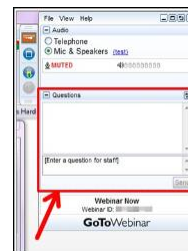




Have Questions?



Type them into questions box!

“Why am I muted?”

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1



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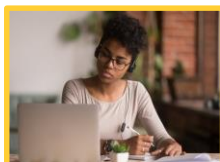
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8

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ACS Scholars Endowment Founder Joe Vacca, retired Vice President of Chemistry, Merck & Co., meets with his 2018 ACS Scholar Johanna Masterson, now a grad student at Princeton University.

“Chemistry has been good to me...so I wanted to make a significant gift to provide that opportunity to others.”

9



Date: Wednesday, January 27, 2021 @ 2-3pm ET
Speakers: Renetta Garrison Tull, University of California, Davis and Sonia Zárate, Howard Hughes Medical Institute
Moderator: Jodi Wesemann, American Chemical Society

[Register for Free!](#)

What You Will Learn:

- The impact of effective mentorship on research productivity, academic and research self-efficacy, and career satisfaction
- The attributes of effective mentorship that contribute to persistence and success
- How you can use evidence-based approaches to optimize formal and informal mentorship

Co-produced with: ACS Education



Date: Thursday, January 28, 2021 @ 2-3:30pm ET
Speakers: Katrina Knauer, BioCollection Inc. and Philippe Reutenauer, Léa Nature
Moderator: Peter Boul, Aramco Americas

[Register for Free!](#)

What You Will Learn:

- Challenges in recycling of plastics and scaling new depolymerization technologies
- Chemical pathways for breaking down single-use plastics with an emphasis on polyethylene
- Synthesis of new polymers from chemically recycled monomers
- How food companies can modify their relationship towards plastics to face the public concerns linked to plastic packaging
- Mechanical recycling and its limitations and the emerging solutions for chemical recycling

Co-produced with: ACS Division of Polymer Chemistry



Date: Tuesday, February 2, 2021 @ 7-8pm ET
Speaker: Davis Tran, Wakefield High School / Jason Love, Wakefield High School / Nelson Fuamenya, Wakefield High School / Ana Munoz, Wakefield High School / Hina Aftab, Wakefield High School / Verlese Gaither, Wakefield High School
Moderator: Peter Dorhout, Iowa State University

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What You Will Learn:

- Ideas, insights, and perspectives on cultivating an equitable, inclusive STEM classroom
- Practical takeaways to encourage equity and inclusivity in the STEM classroom
- Overcoming challenges and barriers to achieving equity

Co-produced with: American Association of Chemistry Teachers, ACS Department of Diversity Programs, ACS Diversity, and the ACS Inclusion & Respect Advisory Board

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10




Fluid Movements

**Interpreting the Past,
Present, and Future of Water**

THIS ACS WEBINAR WILL BEGIN SHORTLY...

11

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Fluid Movements: Interpreting the Past, Present, and Future of Water



Jesse Smith
Research Curator,
Science History Institute



Jahnvi Phalkey
Founding Director,
Science Gallery Bengaluru



Daryl Boudreaux
Principal, Boudreaux & Associates LLC and
member, Joseph Priestley Society

Presentation slides are available now! The edited recording will be made available as soon as possible.

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This ACS Webinar is co-produced with Science History Institute and Chemical & Engineering News.

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Fluid Movements: Interpreting the Past, Present, and Future of Water

January 21, 2021



Presenters: **Jahnavi Phalkey**, Founding Director, Science Gallery Bengaluru
Jesse Smith, Research Curator, Science History Institute

Moderator: **Daryl Boudreaux**, Joseph Priestley Society



Jesse Smith
Research Curator,
Science History Institute



Jahnavi Phalkey
Founding Director,
Science Gallery Bengaluru



Audience Challenge Question

ANSWER THE QUESTION ON BLUE SCREEN IN ONE MOMENT

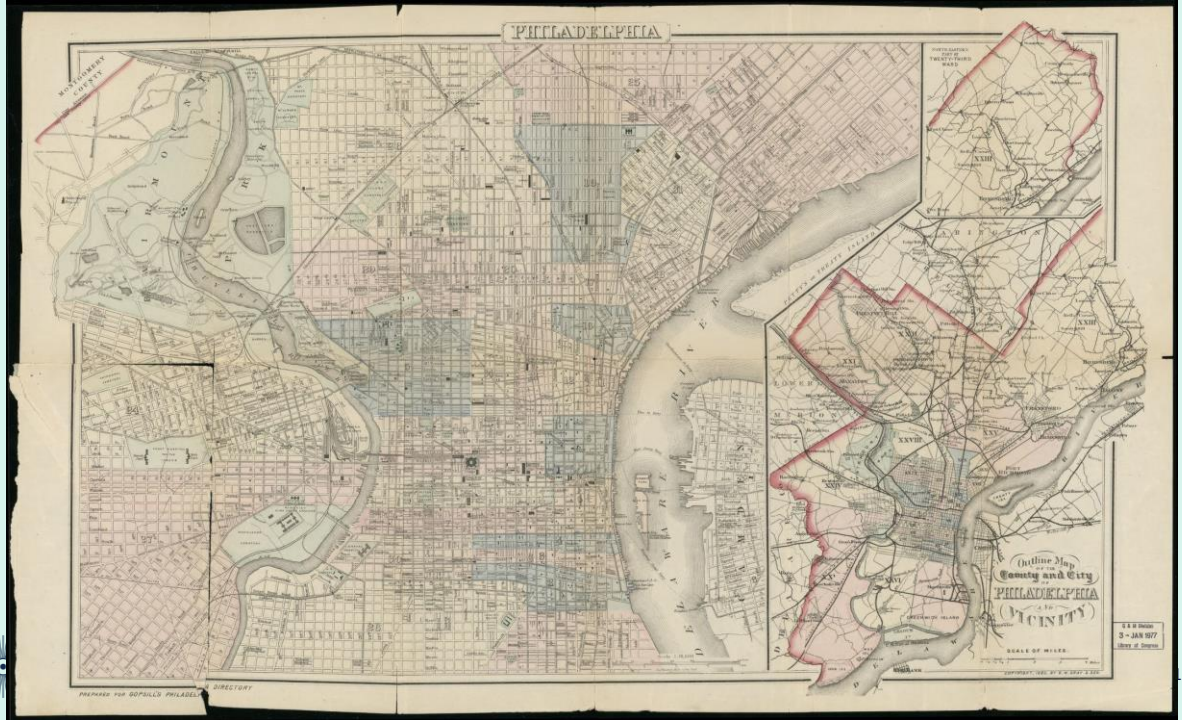


What best defines “the interpretation of water” mean to you?

- The scientific understanding of water
- The natural history of water
- The social history of water
- Contemporary challenges to water equity
- One oxygen and two hydrogen atoms that are connected by covalent bonds

** If your answer differs greatly from the choices above tell us in the chat!*





7



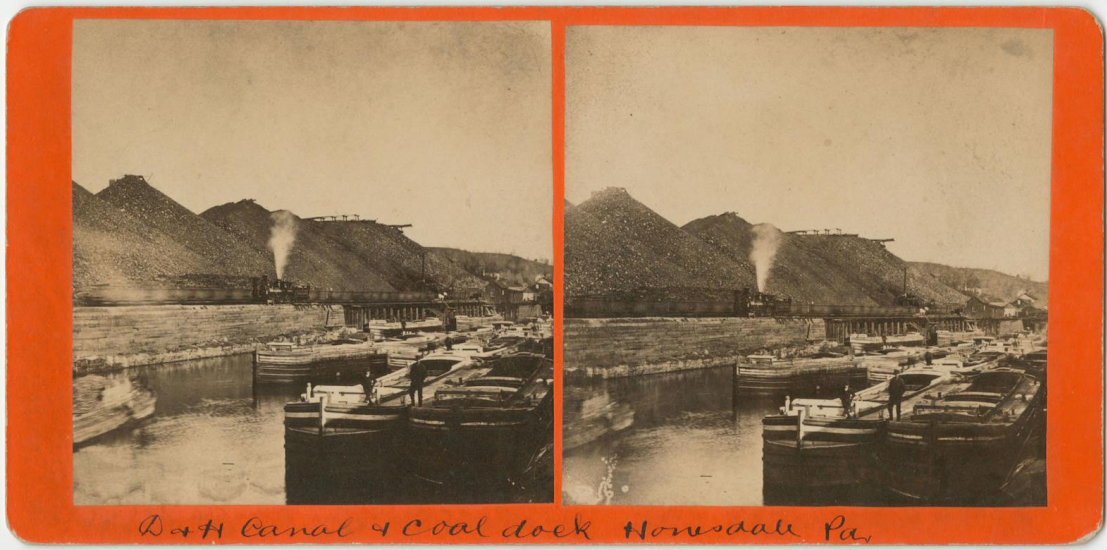
down stream

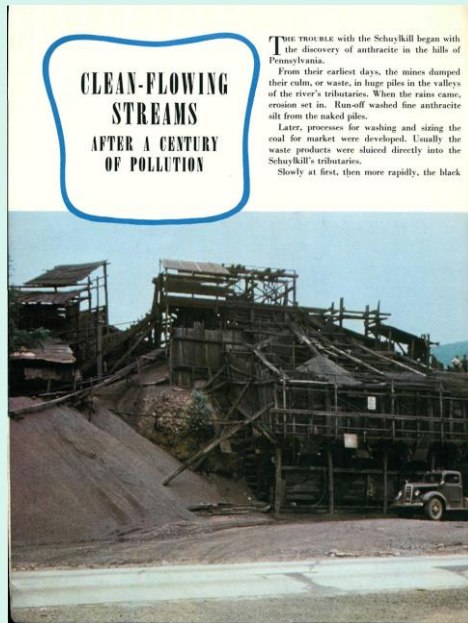
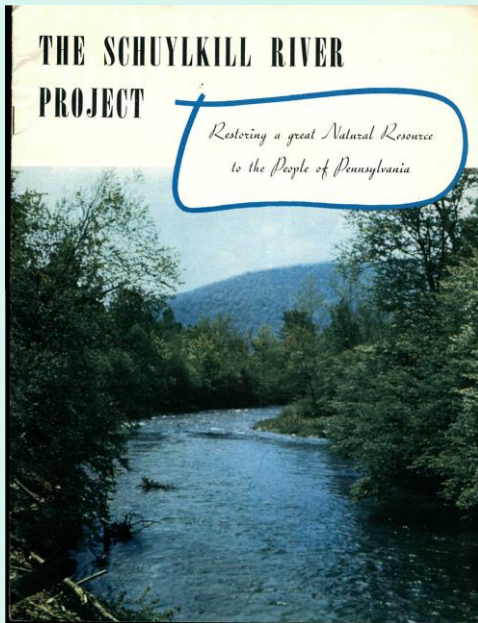


down stream

- **Local** (Philadelphia, 1800s)
- **State** (Pennsylvania, late 1800s to mid-1900s)
- **Interstate River Basin** (New York, New Jersey, Pennsylvania, and Delaware with the U.S. Army Corps of Engineers, mid-1900s)
- **Federal** (United States, 1970s)







THE TROUBLE with the Schuylkill began with the discovery of anthracite in the hills of Pennsylvania.

From their earliest days, the mines dumped their culm, or waste, in huge piles in the valleys of the river's tributaries. When the rains came, erosion set in. Run-off washed fine anthracite silt from the naked piles.

Later, processes for washing and sizing the coal for market were developed. Usually the waste products were sluiced directly into the Schuylkill's tributaries. Slowly at first, then more rapidly, the black



Soon . . . more of Pennsylvania's famous fishing.



Soon . . . river sports on the Schuylkill again.



Soon . . . more forests equipped with water housing camps.

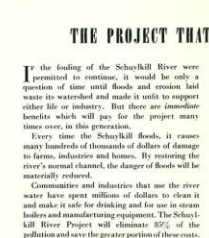


Soon . . . plentiful, clean water for job-making industries.



Soon . . . more good times along the clean streams.

Soon . . . more healthful outdoor life for youngsters.



Soon . . . savings in equipment maintenance and water conditioning costs.

THE PROJECT THAT PAYS FOR ITSELF

If the fouling of the Schuylkill River were permitted to continue, it would be only a question of time until floods and erosion laid waste its watershed and made it unfit to support either life or industry. But there are immediate benefits which will pay for the project many times over, in this generation.

Every time the Schuylkill floods, it causes many hundreds of thousands of dollars of damage to farms, industries and homes. By restoring the river's normal channel, the danger of floods will be materially reduced.

Communities and industries that use the river water have spent millions of dollars to clean it and make it safe for drinking and for use in steam boilers and manufacturing equipment. The Schuylkill River Project will eliminate 85% of the pollution and have the greater portion of these costs.

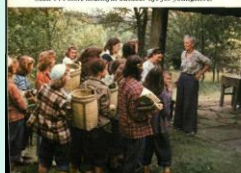
Plentiful supplies of clean water are necessary to both residential and industrial communities. Even in its present condition, the Schuylkill River and its branches serve almost a third of the Commonwealth's population. Cleaned up, the river system will be a magnet that will draw new, job-making industries to the area, and convert idle land into residential and industrial property paying its fair share of local and state taxes.

It is a historical fact that less than 25 years ago, the beauty of the Schuylkill inspired artists and writers, and drew visitors and vacationers from far and near. Restoration of that beauty will restore the river as a recreation spot. Fishermen will find fish once more swimming in the clear waters and aquatic fowl attracted to its quiet pools.



Soon . . . the return of famed scenic splendor.

Soon . . . safe, clean swimming facilities.





The Comprehensive Plan

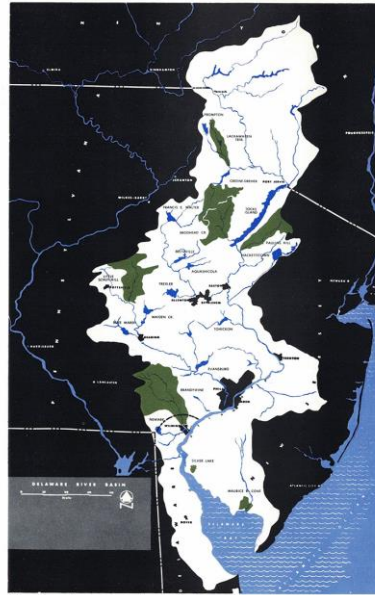
The 100-year renewable duration of the Delaware Basin Compact is reflected in its requirement that the Commission maintain a Comprehensive Plan with sights trained on the needs in the distant future of the 22 million persons who live in the Basin and the area served by it. The Comprehensive Plan is thus the Commission's blueprint for orderly development of the Valley's water resources for all purposes and a means for averting crisis-provoked - and usually inadequate - solutions.

The Commission complied with this Compact mandate at one of its early meetings by adopting a First Phase Comprehensive Plan comprising 20 water control projects ranging in size from two quarter-million dollar flood control programs on South Jersey streams to the \$122 million Tocks Island Dam.

Shortly afterward, the Plan was enlarged by the addition of Cannonsville, a New York City reservoir under construction; and existing water supply and waste disposal installations, recreation areas and river stage and stream gauging stations; and, pending formulation of the Commission's own pollution abatement policies, the water quality regional zone classifications produced more than 20 years earlier by Incodel.

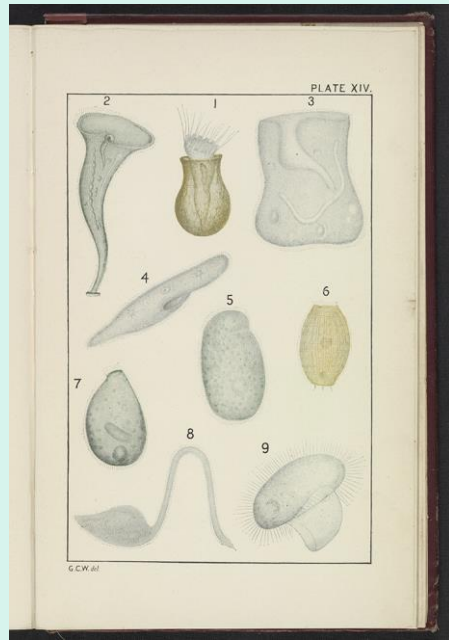
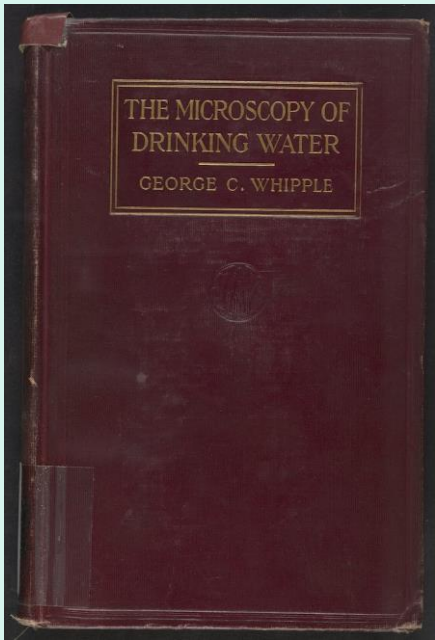
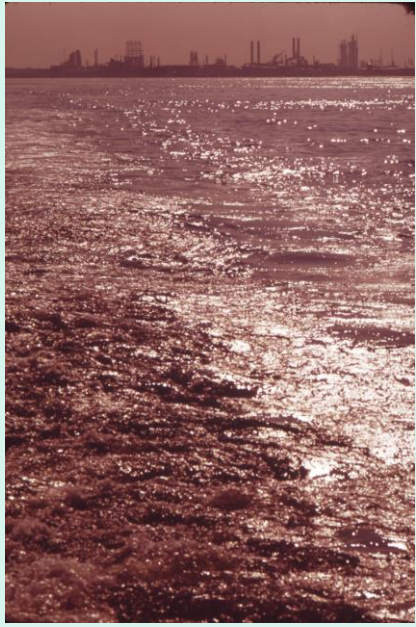
As Commission policies evolve in all areas of its authority - also including recreation, fish and wildlife, water supply, flood loss reduction, hydroelectric power, low flow augmentation, and means of project financing - it is anticipated that they will be added to the Plan.

- Major dam and reservoir projects for multi-purpose river control.
- Local watershed projects consisting of systems of small dams and reservoirs and land treatment measures.



Map shows the projects in Phase One of the Commission's Comprehensive Plan.





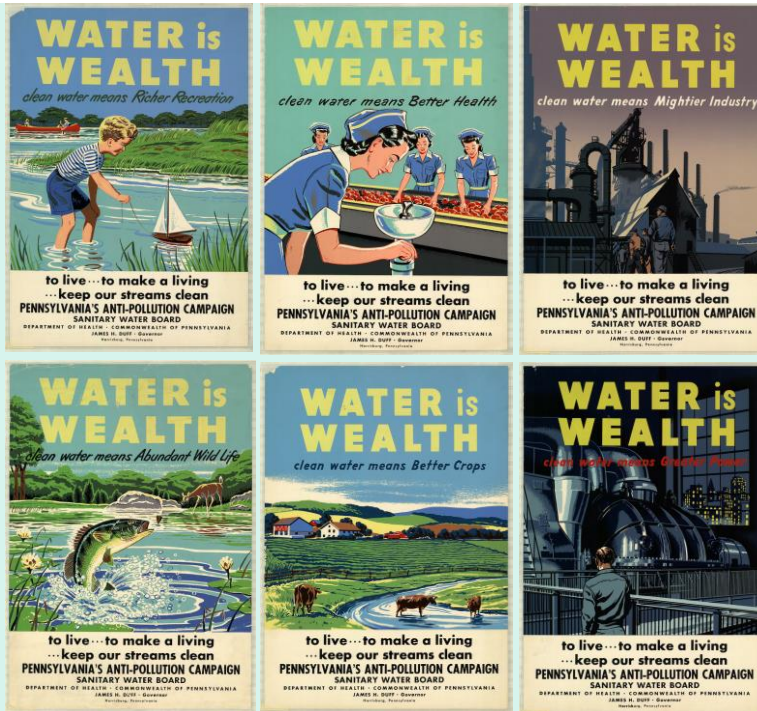


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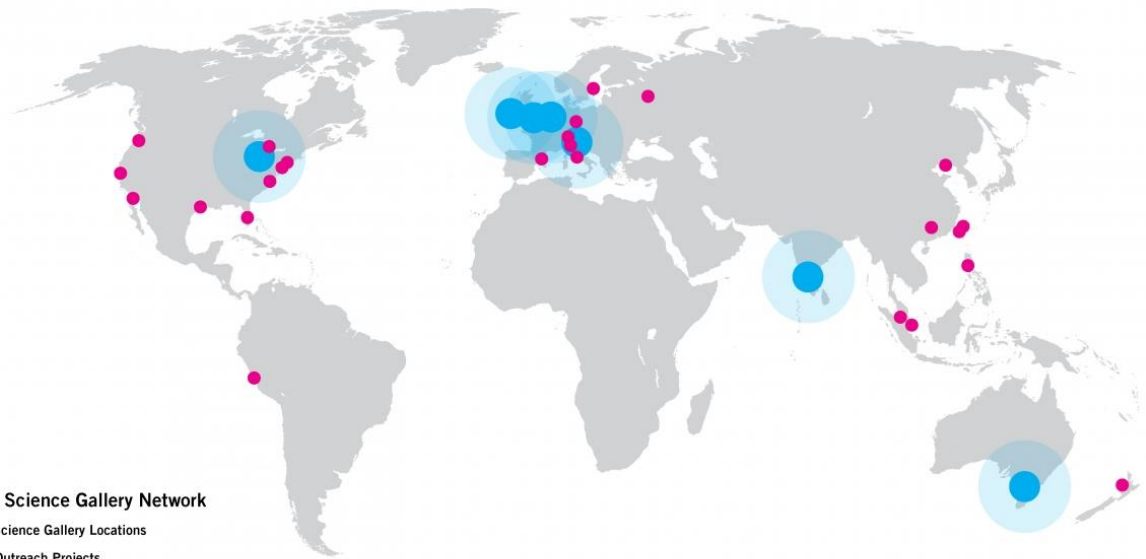
- Slides 1, 3, and 5: Philadelphia Water Department
- Slides 2 and 9: U.S. Library of Congress
- Slides 7, 8, and 12: Library Company of Philadelphia
- Slides 10 and 11: Hagley Museum and Library
- Slide 13: Delaware River Basin Commission
- Slide 14: U.S. Environmental Protection Agency
- Slides 15 and 16: Science History Institute
- Slide 17: Pennsylvania State Archives



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 - Community Initiatives
- Public Lab Complex
- Mentorship Initiative



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1154 sq.m	1233 sq.m	1514 sq.m
PUBLIC LAB COMPLEX	PUBLIC ENGAGEMENT COMPLEX	COMMUNITY SPACES
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15

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| Terra Mars | Argus |
| H2O TODAY | Ice Painting |
| Water is Life | |

LECTURES AND TUTORIALS

15

WORKSHOPS AND MASTERCLASSES

16

FILM SCREENINGS

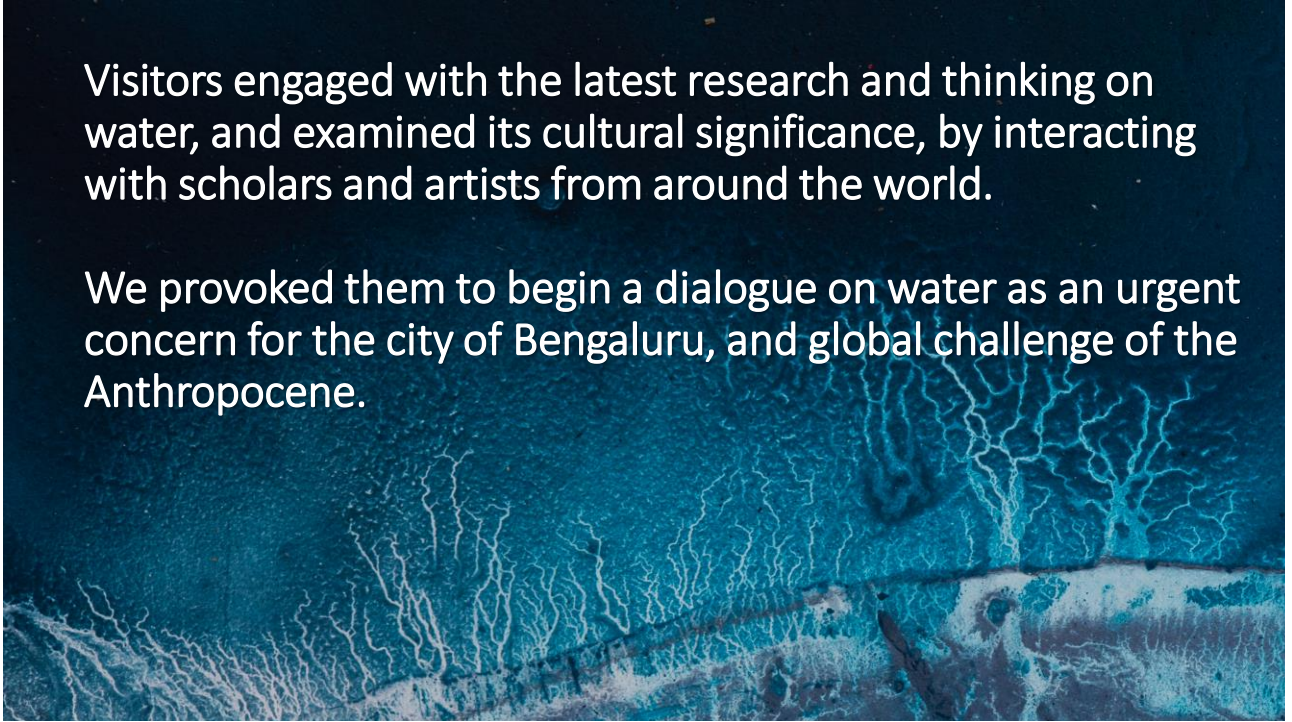
7

EVENTS AND PERFORMANCES

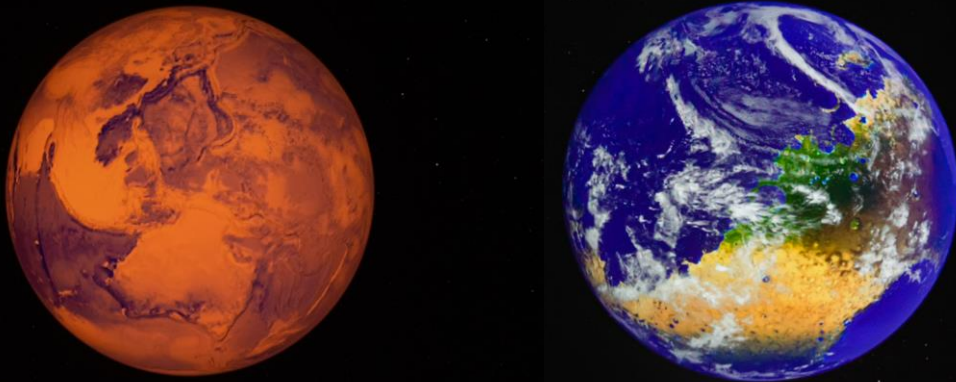
7

Visitors engaged with the latest research and thinking on water, and examined its cultural significance, by interacting with scholars and artists from around the world.

We provoked them to begin a dialogue on water as an urgent concern for the city of Bengaluru, and global challenge of the Anthropocene.

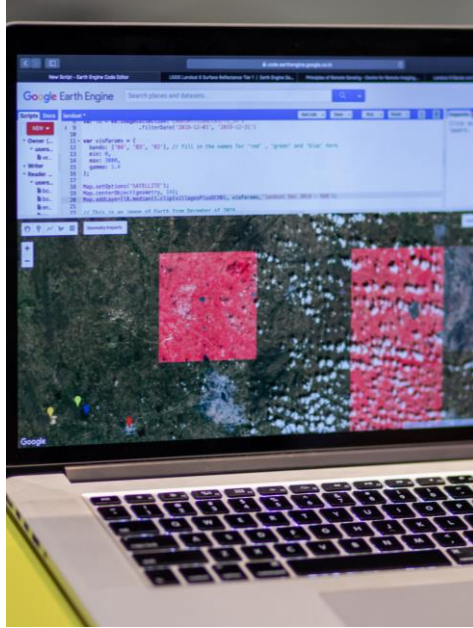


Breaking Open: TERRA MARS

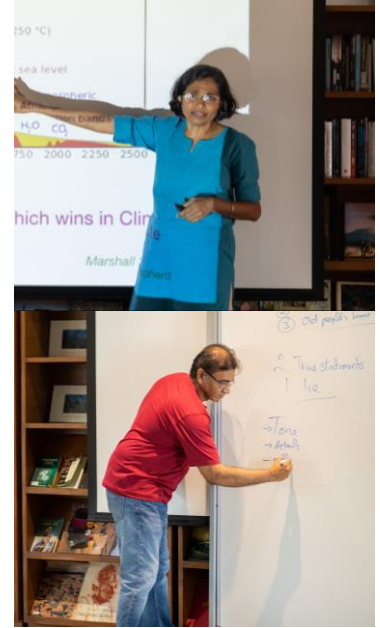




Shape of Water



Deep Dive



Water on the Red Planet

CONFLUENCE

15 lectures, 15 tutorials

fluid dynamists, hydro-ecologist, chemist, historian, writers, physicist, hydrologists, ecologist, biologist, artist - activist, geologist, policy-maker, water researcher



WHY DOES THE RIVER NEED TO FLOW FROM THE MOUNTAINS TO THE SEA?

Jagdish Krishnaswamy
15 December 2019

In this talk, hydro-ecologist Jagdish Krishnaswamy contested the idea that rivers flowing into the sea are a waste. Through examples, he illustrated how the flow of rivers helps maintain a rich biodiversity along its course which is essential for ecological balance. He further built a case for reducing our water consumption in key sectors such as agriculture and putting back more water into our rivers. He highlighted the need for the conservation of remaining free-flowing rivers to preserve their functions and services.

ABOUT THE HYDRO-ECOLOGIST /

Jagdish Krishnaswamy holds a Ph.D in Environmental studies, Duke University, North Carolina, USA. His research and teaching interests include ec hydrology, landscape ecology, conservation planning, ecosystem services and applications of bayesian approaches in understanding complex changes in the environment over space and time. He has coordinated the establishment of instrumented catchments in the Western Ghats and in the Himalayas to study the impacts of land-cover and climate variability on hydrological processes.



"We need to revisit the notion that river water flowing into the sea is a wasteful thing."

- Jagdish Krishnaswamy, hydro-ecologist



"The young people in the audience asked very interesting and sharp questions on what science is, how we can do the right kind of science, and how we can build the right kind of skills. I'd like to congratulate the Science Gallery team on bringing science back into our everyday lives and our everyday conversations."

- Veena Srinivasan, water researcher

NEW FRONTIERS IN WATER SCIENCE

Veena Srinivasan
17 December 2019

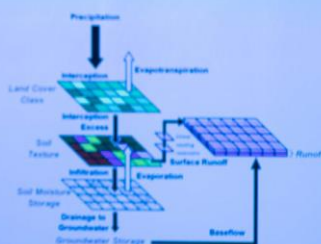
In her lecture, water researcher Veena Srinivasan called for a new approach to science that is problem driven, interdisciplinary and grounded in real-world questions. She presented three examples to illustrate why we must consider anthropologic changes in this new approach. She addressed the case of disappearing surface water in the Upper Arkavathy watershed near Bangalore, the impact of droughts on Chennai and questioned whether tree planting is good or bad for streams.

ABOUT THE WATER RESEARCHER /

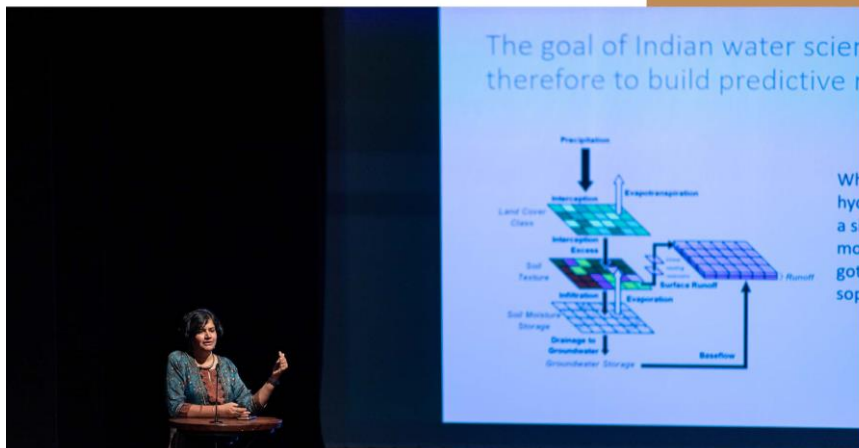
Veena Srinivasan is a Fellow at the Ashoka Trust for Research in Ecology and the Environment (ATREE), Bangalore, where she leads the Water, Land and Society Programme. She also leads the Centre for Social and Environmental Innovation. Veena's research interests include inter-sectoral water allocation, impacts of multiple stressors on water resources, ground and surface water linkages, and sustainable water management policy and practice.

Veena has won several awards for her work including the 2015 Jim Dooge Award for best paper in the journal Hydrology and Earth System Science from the European Geophysical Union, the 2012 Water Resources Research Editor's Choice Award from the American Geophysical Union. She is also a recipient of the Teresa Heinz Environmental Scholars Award.

The goal of Indian water science
therefore to build predictive r



Why
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WATER: AS WE DO NOT KNOW IT

Biman Bagchi

21 December 2019

In this talk, chemist Biman Bagchi invited the audience to explore the unique properties of water which make it a weird substance. His talk explored how the unique molecular properties of water give rise to its structural and dynamic behaviour. This in turn translates into its important role in biological and chemical processes. He also brought forth recent advances in the study of water in complex systems.

ABOUT THE CHEMIST /

Biman Bagchi is a chemist and an Amrut Mody Professor at the Solid State and Structural Chemistry Unit of the Indian Institute of Science. He is known for his studies on statistical mechanics, particularly in the study of phase transition and nucleation, solvation dynamics, mode-coupling theory of electrolyte transport, and dynamics of biological macromolecules, among other fields. He is an elected fellow of the Indian National Science Academy, the Indian Academy of Sciences and The World Academy of Sciences. Besides several scientific articles, he has authored two books, *Molecular Relaxation in Liquids* and *Water in Biological and Chemical Processes: From Structure and Dynamics to Function*.



“*While writing the history of a river, it was really challenging to remain confined to archives and conventional historical methods. I had to integrate findings from various disciplines like natural sciences and biological sciences into my work... [I understood that] there has to be a democratic flow of ideas between various knowledge systems.*”

- Arupjyoti Saikia, historian

THE UNQUIET RIVER: BRAHMAPUTRA

Arupjyoti Saikia

28 December 2019

From landscapes to livelihoods, the river Brahmaputra has shaped the history of Assam. In this lecture, historian Arupjyoti Saikia brought together history, geology and hydrology to present a comprehensive understanding of this mighty river. He spoke about how the river was formed, what makes it unique, and why it is important to think about its future. His lecture was based on his book by the same name.

ABOUT THE HISTORIAN /

Arupjyoti Saikia is currently a Professor in History at the Department of Humanities and Social Sciences, IIT Guwahati. He has a Ph.D from the University of Delhi and was a postdoctoral fellow at Yale University. His research interests are primarily focused on the Economic, environmental and political history of modern Assam. His publications include *A Century of Protests: Peasant Politics in Assam since 1900*, Routledge, Delhi, 2014, *Forests and Ecological History of Assam, 1826-2000*, Oxford University Press, Delhi, 2011, among others.



CULTURAL IMMERSION: UNDERSTANDING CULTURE THROUGH WATER

K.Y. Narayanaswamy
04 January 2020

In this talk, Kannada writer K.Y. Narayanaswamy presented how our culture is tied so closely to water. Water is considered as one of the five elements. Civilizations throughout history have been born, flourished, and destroyed alongside the banks of rivers. All the oral narratives of the world refer to Earth as being born from water. The history of mankind is nothing but the narrative of the many uses of water. Particularly in the Indian context, water is understood as a matriarchal tradition in coexistence and conflict with the patriarchal Fire tradition. Throughout Indian society, the narratives, metaphors, epics, rituals, and folk beliefs surrounding water continue to reveal the unknown cultural politics.

ABOUT THE WRITER /

K.Y. Narayanaswamy is a Kannada poet, scholar, critic, and playwright. His many popular Kannada plays include *Pampa Bharatha*, *Kalavu*, *Anabhigna Shakuntala*, *Chakraratna*, *Klavara Nareyana*, *Hulliseere*, *Mallige*, *Maya Beete Male Mantrika* and *Vinura Vema*. He is credited with adapting Kuvempu's magnum opus *Malegalalli Madumagalu* into a 9-hour play. His works have won him three state Sahitya Academy awards. He also writes screenplays for films. His PhD thesis, *Neera Deevige* is considered a landmark in Kannada cultural studies of water. He is currently a Kannada professor at Maharani Cluster University, Bangalore.



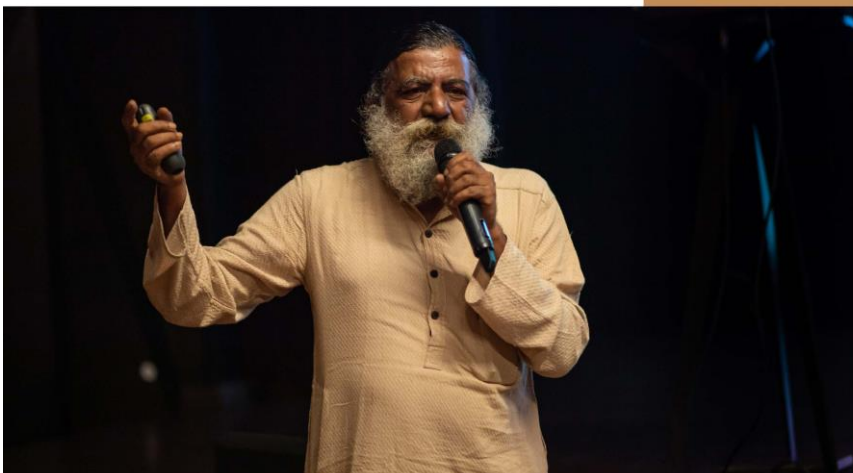
ICE ON EARTH

R. Shankar
05 January 2020

In this talk, theoretical physicist R. Shankar spoke about how ice on earth, also called the cryosphere, is inextricably tied up with the climate of the earth. He explained how it affects all life on earth. This talk also explored why and how climate affects the ice. It further looked at questions, such as what caused the ice ages? How did they affect the sea level? Why is this interplay of great concern today? Finally, he presented a brief account of his research on Himalayan glaciers.

ABOUT THE PHYSICIST /

R. Shankar is a theoretical physicist. After a Ph.D. in particle physics, his research interests turned to quantum condensed matter physics. Along with this, he worked on tsunami modelling for some time. After that, combining his love for the mountains and physics he began working on Himalayan glaciers.



CLIMATE CHANGE AND WATER RESOURCES

Pradeep Mujumdar
11 January 2020

In this talk, hydrologist Pradeep Mujumdar looked at how climate change will most likely introduce an additional burden on the already stressed water systems in India. The talk presented the latest research on assessment of climate change impacts on regional hydrology, with emphasis on likely changes in water availability, agricultural water demands, floods and droughts and water quality. He also spoke about the challenges of assessing the impacts of climate change on water resources at different space-time scales.

ABOUT THE HYDROLOGIST /

Pradeep Mujumdar is currently serving as a Professor in the Department of Civil Engineering and as Chairman, Interdisciplinary Centre for Water Research. He has earlier served as the Chairman of the Department from November 2006 to December 2010 and as KSIIDC Chair Professor from August 2012 to July 2015. He holds an Associate Faculty position in the Center for Earth Sciences at IISc Bangalore. His area of specialization is Water Resources with a focus on climate change impacts on hydrology. He has served as the Chairman of the Water Resources Management section of the International Association for Hydro-Environment Engineering and Research (IAHR), and as a reviewer for the Assessment Report 5 (AR5) of the IPCC.



We need to closely observe the increasing frequency of droughts and floods in our ecosystem, and understand how these extreme events influence water resources."

- Pradeep Mujumdar, hydrologist



Ecologists tend to think of remote areas like forests, and protected areas, when they talk about nature. The conversation about nature in the city tends to fall through the cracks, and we need to remedy this."

- Harini Nagendra, ecologist

BENGALURU: CITY OF WATER

Harini Nagendra
12 January 2020

In this talk, ecologist Harini Nagendra took the audience on a journey through the history of water systems in Bengaluru - starting from the 6th century CE to the present day. She explained how lakes were built and how they became an important source of water for the city. Today, they are used solely for recreation, environmental support and ornamental views. She argued that urbanization and water conservation can go together and that we need to look at our history to manage our future.

ABOUT THE ECOLOGIST /

Harini Nagendra is a Professor of Sustainability at Azim Premji University, where she anchors the Centre for Climate Change and Sustainability. Over the past 20 years, her research has examined people-nature relationships in forests and cities. For her interdisciplinary research and practice, she has received a number of awards including the 2009 Cozzarelli Prize from the US National Academy of Sciences, and the 2013 Elinor Ostrom Senior Scholar award, among others. Her publications include the books *Nature in the City: Bengaluru in the Past, Present and Future* (Oxford University Press, 2016) and *Cities and Canopies: The Tree Book of Indian Cities* (Penguin, 2019) as well as recent publications in *Nature*, *Nature Sustainability*, and *Science*. She writes regularly on public science issues in newspapers, and blogs.



WITHOUT WATER: BETWEEN LIFE AND DEATH

Shashi Thutupalli
19 January 2020

In this lecture, biologist Shashi Thutupalli questioned our understanding of life and death. His lecture was based on his exhibit FrankenShrimp, where dehydrated brine shrimp remain dormant until they are placed in water. Once in water, they begin their life processes. He spoke about how cells in living beings need to be in a "liquid state" to be active, highlighting the importance of water in life sustaining processes.

ABOUT THE BIOLOGIST /

Shashi Thutupalli is a Professor of Biology at the National Centre for Biological Sciences. His research program aims for a broad understanding of the origins and organization of living systems. Thutupalli's work is interdisciplinary combining experimental and theoretical techniques drawn from physics, engineering and biology.

“*My team and I are attempting to examine what happens to living organisms at the cellular level when they have to survive without water.*”
- Shashi Thutupalli, biologist



“*His work is part of an ongoing investigation into the current state of nature, both as a crisis which traverses a political realm but also a cultural contestation of how 'nature' is thought of in the Anthropocene era.*”

- U. Nair, journalist

RELEVANCE OF TRADITIONAL WATER SYSTEMS TODAY: A CASE STUDY FROM THE THAR DESERT

Ravi Agarwal
19 January 2020

In this talk, artist Ravi Agarwal presented the relevance of traditional water systems. He began with an introduction to the concept of Anthropocene - the current geological age during which human activity has been the dominant influence. He later spoke about the Thar desert in Rajasthan and how the traditional water management systems were taken over by the Indira Gandhi Canal. Through his talk, Ravi argued for learning from these traditional systems in designing and implementing future developmental plans.

ABOUT THE ARTIST AND ACTIVIST /

Ravi Agarwal has an interdisciplinary practice as an artist, photographer, environmental campaigner, writer and curator. His work explores key contemporary questions of ecology, society, urban space and capital. Photography has been a prime medium for him for over four decades, which has expanded over time to include video, public art, installations, and recently also printmaking. His work has been shown widely including at the Yinchuan Biennial, Kochi Biennial, and the Sharjah Biennial, among other. He co-curated the Yamuna-Elbe project, Indo German twin city public art and ecology project (2011), and Embrace our Rivers an Indo-European project in Chennai (2018).



WATER AND HUMAN SETTLEMENTS

Gajanana Sharma
25 January 2020

In this talk, Kannada writer Gajanana Sharma presented his perspective on the connection between water and human settlements. The first part of his talk looked into the history of how humans choose a place to live based on the presence of rivers. This meant that civilizations were born on the banks of the river. In the second half of the talk, he questioned our current plan to move rivers as per our will and bring their water to our habitats instead. He illustrated this through the example of the proposed project to divert the water of river Sharavati to Bengaluru.

ABOUT THE WRITER /

Gajanana Sharma is a prominent Kannada writer. He has a master's in technology and has worked as Chief Engineer in the Karnataka Electricity Board. He is also an activist for children's theatre and has directed many dramas. He has written about the 100 years of the history of electricity in Karnataka and frequently writes dialogues for many films including the national award winning film "Dweepa".



THE DISAPPEARANCE OF THE SARASWATI

K.S. Valdiya
26 January 2020

In this talk, prominent geologist K.S. Valdiya presented a talk on the mythical river Saraswati in Western India and took audiences on a journey through time. By providing evidence of human activity along its course and images of underground water challenges, Valdiya argued that the river existed up until the 2000 years ago. He ended his lecture by proposing that tectonic fault lines changed the course of the river and pushed the remaining part of it underground.

ABOUT THE GEOLOGIST /

K.S. Valdiya (1937–2020) was a distinguished scientist, academician, author, and an active environmentalist. He was internationally recognised for his path-breaking work in the fields of Geology and Environmental Science. In 2007, he was awarded the Padma Shri for his outstanding contribution to Science. His field of specialisation was Tectonics with special reference to active faults and Environmental Geology. He wrote over 110 research papers, authored 14 books, edited 9 books, and penned 40 articles in Hindi towards popularisation of science.



INDIA'S WATER PROBLEMS HAVE SIMPLE SOLUTIONS

Mihir Shah
29 January 2020

In this talk, policy-maker Mihir Shah argued that contrary to popular belief, the current water crisis in India is amenable to solutions that are both reasonably simple and practically implementable. The talk summarised the key elements of a new water strategy and demonstrated how its implementation can be carried out. Based on a radically new understanding of development, this water strategy is absolutely essential, given the emerging reality on the ground in this era of climate change, as also our growing understanding of water and its place in the development process.

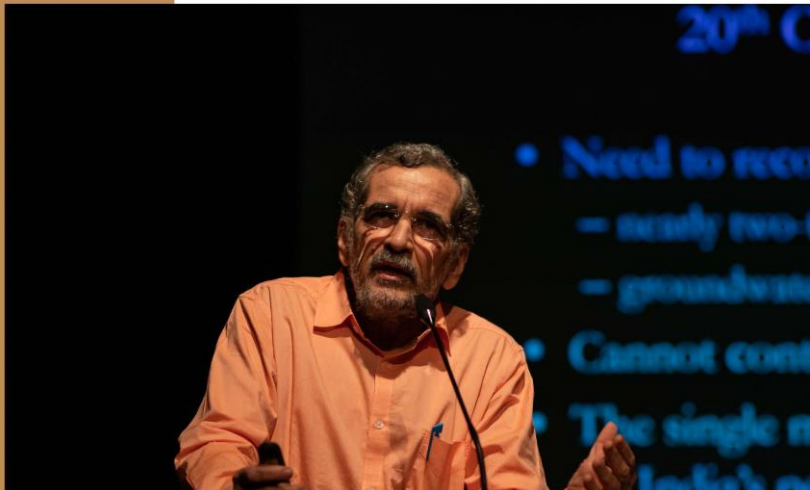
ABOUT THE POLICY-MAKER /

As Member, Planning Commission, Government of India from 2009 to 2014, Mihir Shah was chiefly responsible for drafting the paradigm shift in the management of water resources enunciated in the 12th Five Year Plan. In 2017-18, he chaired a Task Group set up by the Government of Karnataka, that submitted a new Water Policy in December 2018. In November 2019, he was asked by the Government of India to chair the Committee to draft a new National Water Policy.

“

We imagine that India's water problem is impossible to resolve. But India is a water abundant country, and the problem lies in the way that water is managed."

- Mihir Shah, policy-maker



“

Cumulus clouds are very familiar to all of us. But my team and I are attempting to understand how they are formed in the skies, and how we can simulate them in a lab and on a computer."

- Roddam Narasimha, fluid dynamicist

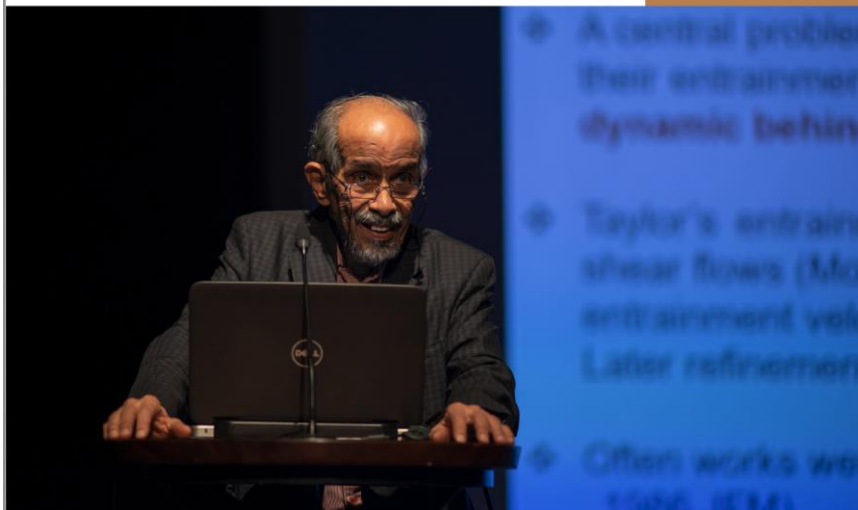
THE MYSTERY OF THE CUMULUS CLOUD

Roddam Narasimha
30 January 2020

In this talk, fluid-dynamicist Roddam Narasimha presented his work with Cumulus clouds. Cumulus clouds are those clouds which have a flat base but are large and fluffy. He began by sharing his fascination with clouds, which began at an early age. A firm believer in the trans-disciplinary nature of knowledge, he presented examples from classical Indian literature and art depicting clouds. In the second half of the lecture he gave the audience a flavour of the scientific rigour and the extent of details involved in his work in fluid dynamics. He proceeded to tell the audience about how clouds can be created artificially in a laboratory.

ABOUT THE SCIENTIST /

Roddam Narasimha (1933–2020) was the Chairman of the Engineering Mechanics Unit at the Jawaharlal Nehru Centre for Advanced Scientific Research, and the Director of the National Institute of Advanced Studies, Bangalore. He was awarded the Padma Vibhushan, India's second-highest civilian award, in 2013. He was an aerospace scientist and fluid dynamicist who also held the Pratt & Whitney Chair in Science and Engineering at the University of Hyderabad.



TUTORIALS

“The tutorial session was amazing because the students came from different backgrounds, but they had a good understanding of the topic that I spoke about. I would value this experience much more than just delivering a lecture in a classroom.”

- Pradeep Mujumdar, hydrologist



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See you February 11th!

The Power of Hydrogen:
From First Element to Green
Energy Catalyst

Dr. Vijay Kapur





Fluid

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Movements

Interpreting the Past, Present, and Future of Water

ASK YOUR QUESTIONS AND MAKE YOUR COMMENTS IN THE QUESTIONS PANEL NOW! ⁶⁵



Date: Wednesday, January 27, 2021 @ 2-3pm ET
Speakers: Renetta Garrison Tull, University of California, Davis and Sonia Zárate, Howard Hughes Medical Institute
Moderator: Jodi Wesemann, American Chemical Society

Register for Free!

What You Will Learn:

- The impact of effective mentorship on research productivity, academic and research self-efficacy, and career satisfaction
- The attributes of effective mentorship that contribute to persistence and success
- How you can use evidence-based approaches to optimize formal and informal mentorship

Co-produced with: ACS Education



Date: Thursday, January 28, 2021 @ 2-3:30pm ET
Speakers: Katrina Knauer, BioCollection Inc. and Philippe Reutenauer, Léa Nature
Moderator: Peter Boul, Aramco Americas

Register for Free!

What You Will Learn:

- Challenges in recycling of plastics and scaling new depolymerization technologies
- Chemical pathways for breaking down single-use plastics with an emphasis on polyethylene
- Synthesis of new polymers from chemically recycled monomers
- How food companies can modify their relationship towards plastics to face the public concerns linked to plastic packaging
- Mechanical recycling and its limitations and the emerging solutions for chemical recycling

Co-produced with: ACS Division of Polymer Chemistry



Date: Tuesday, February 2, 2021 @ 7-8pm ET
Speaker: Davis Tran, Wakefield High School / Jason Love, Wakefield High School / Nelson Fuamenya, Wakefield High School / Ana Munoz, Wakefield High School / Hina Aftab, Wakefield High School / Verlese Gaither, Wakefield High School
Moderator: Peter Dorhout, Iowa State University

Register for Free!

What You Will Learn:

- Ideas, insights, and perspectives on cultivating an equitable, inclusive STEM classroom
- Practical takeaways to encourage equity and inclusivity in the STEM classroom
- Overcoming challenges and barriers to achieving equity

Co-produced with: American Association of Chemistry Teachers, ACS Department of Diversity Programs, ACS Diversity, and the ACS Inclusion & Respect Advisory Board

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