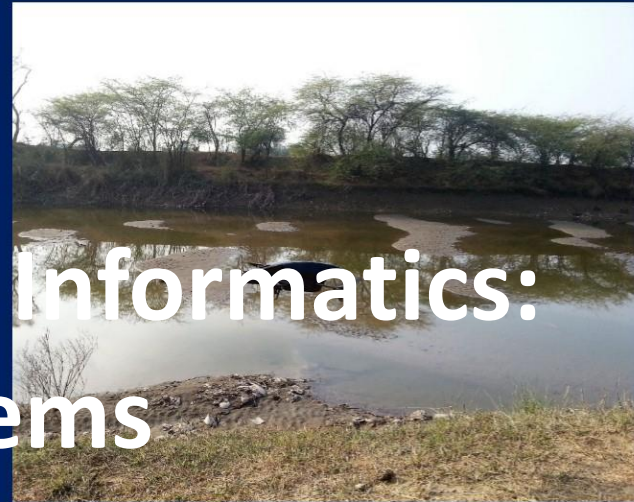
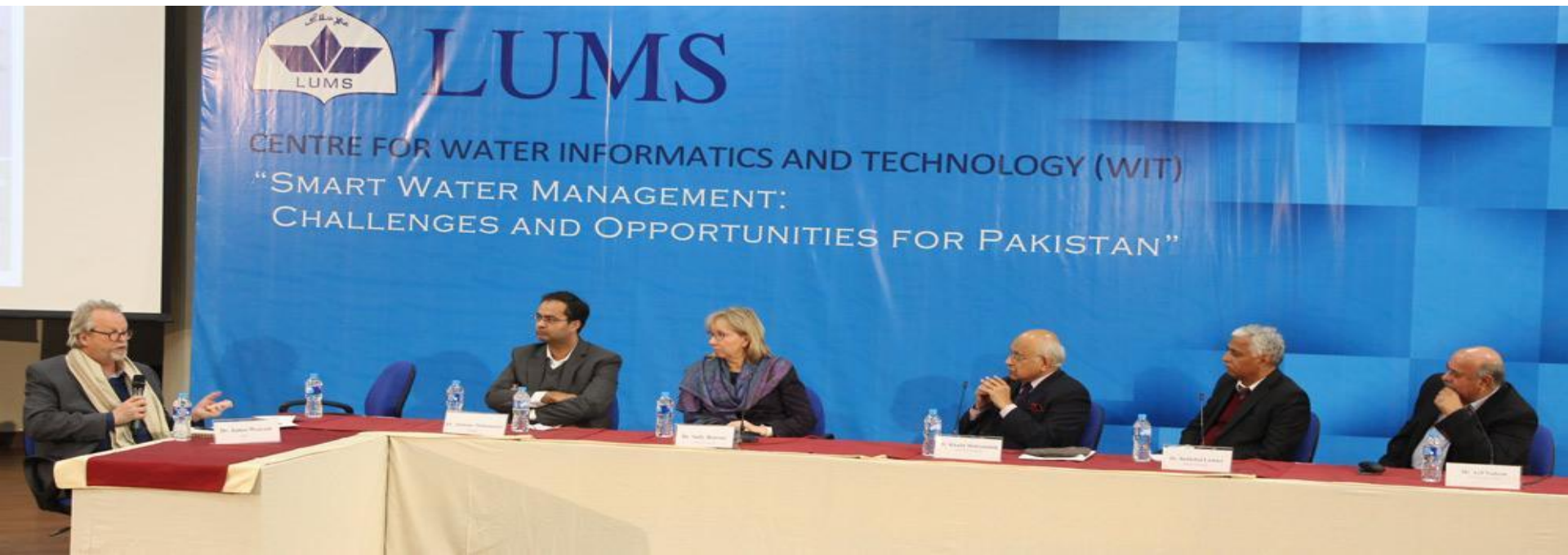


Summer School on Water Informatics: Science and Systems



WIT - History of establishment

- Center idea formally proposed – Jan 2015 (SSE AB Meeting)
- Center approved by LUMS MC – Oct 2015
- Center inaugurated – Jan 22, 2016 (SSE AB Meeting)
- A unique multi-disciplinary hub focusing on:
 - Hydro-informatics and Precision Agriculture
 - Water economics and public policy for sustainable water management
 - Understanding nexus of water with energy, climate, agriculture,



WIT Status - 2016

- Advisory Group
- Core Team
- Faculty Associates
- Internal Seed Grants
- Flagship projects
- Research Network
- Trainings
- Visiting students
- International Visibility
- Media development
- .

WIT Status - 2017

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- .



Top experts from MIT, Stanford, Nestle, GWP, Wold Bank, MUET, PAC

WIT Status - 2017

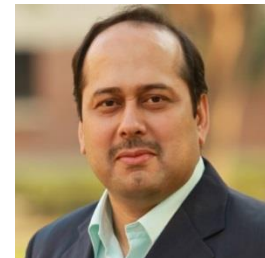
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- .

- Director
- Program Team
 - Program Activity Coordinator
 - Administrative Manager
 - Grant Specialist
- Technical Team
 - Electronic Engineer
 - Software Engineer
 - Field Technician
- Visitors, students and Interns



WIT Status - 2017

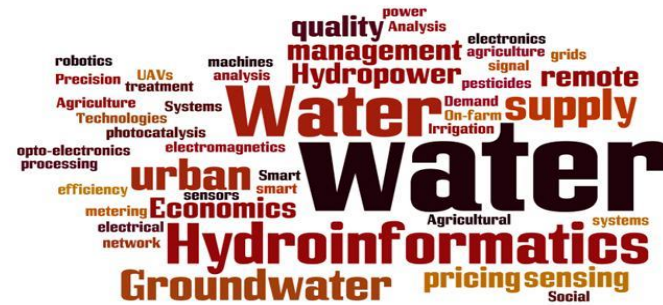
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- First Cohort of **13** Faculty Associates
- Various Depts and Schools (Engineering, Sciences, Economics, Business)
- Each receives a seed grant, honorarium and access to WIT core facilities

WIT Status - 2017

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- Internal Request for Proposals (RFP) – April 2016
- Peer-review process (many AG members involved)
- Ten Stage-1 proposals awarded
- Some Project Themes
 - Water quality sensors
 - Micro- hydro from canals
 - Groundwater economics
 - Remote sensing of groundwater
 - Urban demand-side management
 - Water organizational networks
 - Drones for precision agriculture
 - Pesticide removal from water
 - Sky-TEM technology for GW mapping

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- Smart Water Grids
- Irrigation telemetry network (Lahore, Kasur, Bahawalnagar districts)
- Aerial drones for siltation profiling

WIT Status - 2017

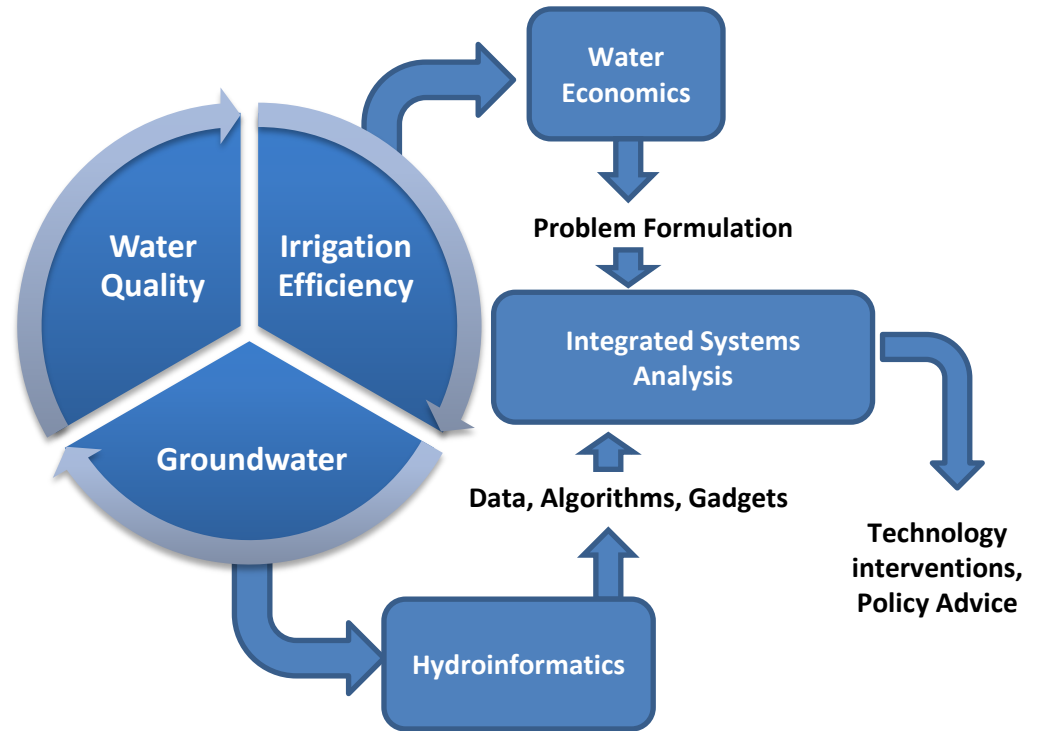
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- Smart Water Grids
- Irrigation telemetry network (Lahore / Kasur, Bahawalnagar)
- Aerial drones for siltation profiling

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- Smart Water Grids
- Integrated Systems Analysis

WIT Status - 2017

- Advisory Group
- Core Team
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- **Research Network**
- Trainings
- Visiting students
- International Visibility
- Media development
- Engagement with Nestle



WIT Status - 2017

- Advisory Group
- Core Team
- Faculty Associates
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- Flagship projects
- Research Network
- **Trainings**
- Visiting students
- International Visibility
- Media development
- Engagement with

- Spring and Fall **Schools** (multiday day 300+ participants, international speakers, lectures ...)
- Technician training for PID
- Seminars
- Regular courses
- Industry forum
- Climate change dialog



WIT Status - 2017

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- International **graduate students** visiting WIT for field work, data collection and collaboration
- Students in 2016
 - Univ of Sussex
 - MIT
 - King's College London
 - University of Kaiserslautern
 - Univ of California, Davis



WIT Status - 2017

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WIT work featured at:

- MIT News,
- IEEE Technology and Society Magazine (to appear)
- QS-Asia newsletter
- HEC newsletter
- Invited lectures in workshops and summer schools

MIT News
ON CAMPUS AND AROUND THE WORLD

Browse

or

Search



FULL SCREEN

Irrigated plains of the Punjab province in Pakistan, viewed from a Mughal tower in Sheikhupura District

Photo: James Wescoat



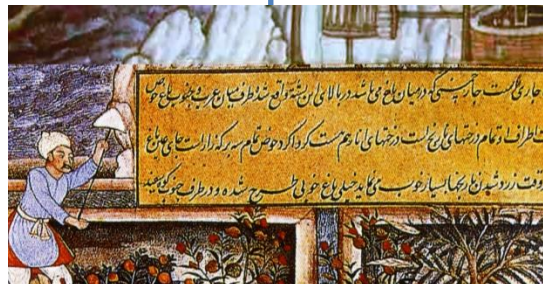
A smart water grid for the Indus Basin

Architect and MIT Professor James Wescoat promotes institutional capacity building to manage a critical resource.

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- Develop media content for public awareness.
- Full-length documentary film **Water Garden: Legend of Shalimar** commissioned by WIT.
- Multi-episode documentary series in planning.
- **Water 101 MOOC** and **Water Archive of Pakistan**



[**PLAY VIDEO**](#)

WIT Status - 2017

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 - Flagship projects
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 - Visiting students
 - International Visibility
 - Media development
 - Industry Affiliate Program
- Various models for engagement with Industry and Public Sector organizations
 - A first industry affiliate program in water sector in Pakistan
 - Nestle-Pakistan as founding member
 - Membership opened now for
 - Corporate giants
 - Small industries
 - NGOs
 - Public sector organizations
 - Strategic Participation with other academic centers of excellence on water.

School Overview

- Water Informatics as a unifying theme
- 2 main modules over 3 Days
 - Module 1. Systems Analysis
 - Module 2. Remote Sensing
- 14 invited speakers, lecturers and panelists
- Main instructors
 - Module 1. Dr Elena Rovenskaya (IIASA), Dr Afreen Siddiqi (MIT)
 - Module 2. Dr Susan Ustin (UC Davis), Dr Stefano Vignudelli (CNR)
- 13 Lectures / tutorials
- 5 case studies / research talks
- 1 Panel discussion
- 1 documentray screening
- Closing session
 - Keynote address
 - MoU signing
 - Certificate distribution

General Information

- **Lecture Venue**
- **Campus Entry / Name Tags**
- **Meal Coupons:** Avail at Pepsi Dining Center (PDC)
- **Attendance Policy:** An attendance sheet will be circulated twice daily (AM and PM).
- **Lecture Hall Policy:** It is strongly advised that mobile phones be switched OFF during lecture. Leaving or entering the Lecture Hall while a lecture is in progress, is highly discouraged. Also, please show your respect to lecturers and speakers by avoiding conversation amongst yourselves.
- **Course Material:**
Handouts to be distributed during lectures
<https://cyphynets.lums.edu.pk/index.php/WISS2017>
- **Certificates of Completion:** Attendance and participation in any surveys / assessments

Organization Team

Logistical Support

- Dept of Electrical Engineering at SSE, LUMS

Volunteers

- LUMS Students
- CYPHYNETS Lab, LUMS

Sponsorship

- Higher Education Commission of Pakistan
- Nestle Pakistan

Technical Program Committee

Abubakr Muhammad (LUMS/WIT)
Sanval Nasim (LUMS)
Zubair Khalid (LUMS)
Imran Cheema (LUMS)
Afreen Siddiqi (MIT)
Waqas Qazi (IST)
Asif Khan (UET Peshawar/WIT)



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Local Organization Team

- Dr Abubakr Muhammad
- Ms. Fazilda Nabeel
- Mr. Talha Manzoor
- Mr. Soban Hameed

