

# Clarkson University

Clarkson-SRIHER-ICMR Indo-US

Knowledge Initiative Project

August 5-9, 2019

## TRAINING WORKSHOP ON LOW-COST AIR QUALITY SENSORS AND RELATED DATA ANALYTICS

Day	Morning		Afternoon	
<b>Monday</b>  Theme: Air quality background; data availability	09.00 - 09.30	Introduction to workshop goals SN 214 (Dhaniyala/Powers)	01.15 - 03.00	Activity: Get monitoring data from AirNow/Env: Canada  SN 241 (Dhaniyala/Hopke)
	09.30 - 10.30	Air quality related health effects SN 214 (Hopke)		
	10.30 - 10.45	Break	03.00 - 03.15	Break
	10.45 - 12.00	Air quality history and regulations SN 214 (Hopke)	03.15 - 04.30	Discussion and experimental design in groups  SN 241 (Dhaniyala/Rossner)
	12.00 - 01.15	Linking air quality and health in India MPR (Balakrishnan)		
<b>Tuesday</b>  Theme: Air sensors introduction; lab evaluation of sensors	09.15 - 10.15	Aerosol sampling and measurements SN 214 (Dhaniyala)	01.30 - 03.00	Activity: Laboratory aerosol measurements and sensors  CAMP 292 (Dhaniyala/Rossner)
	10.15 - 10.30	Break	03.00 - 03.30	Break
	10.30 - 12.00	Low-cost air quality sensors SN 214 (Dhaniyala)	03.30 - 04.30	Plan on research project using sensors and employing advanced data analytics  Innovation Space (Various)
	12.00 - 01.15	Food for thought: Global low-cost sensor networks MPR (Dhaniyala)		

For more information about the workshop contact Suresh Dhaniyala ([sdhaniya@clarkson.edu](mailto:sdhaniya@clarkson.edu)), or Angela Rodriguez ([arodrigu@clarkson.edu](mailto:arodrigu@clarkson.edu))

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Day	Morning		Afternoon	
<b>Wednesday</b>  Theme: Sensors and Data analytics	09.15 - 10.30	Introductory data analytics SN 214 (Skufca)	01.15 - 03.00	Group research project Various (Dhaniyala/Rossner)
	10.30 - 10.45	Break	03.00 - 03.15	Break
	10.45 - 12.00	Data visualization and visual analysis SN 214 (Skufca)	03.15 - 04.30	Advanced data analytics I - using R and Python
	12.00 - 01.30	Intro India Electricity Future Game MPR (Powers)		SN 241/239 (Gurajala/Mondal)
<b>Thursday</b>  Theme: Data Analytics and Visualization	09.15 - 10.15	Machine learning basics SN 214 (Skufca)	01.15 - 03.00	Group research project; Measurements/analytics
	10.15 - 10.30	Break	03.00 - 03.15	Break
	10.30 - 12.00	Advanced data analytics II - R/Python SN 241/239 (Gurajala/Mondal)	03.15 - 04.30	Designing experimental plan for aerosol measurements
	12.00 - 01.15	ICMR: Mandate on air quality and health MPR (		Innovation Space
<b>Friday</b>	09.15 - 11.30	Presentations from groups	01.30 - 03.00	India Electricity Future Game
	12.00 - 01.30	Lunch in MPR		

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