

# Pune Knowledge Cluster Presents

## TITLE: CAN WE LEARN FROM INSECT SOCIETIES?

Organized By	Pune Knowledge Cluster (PKC)
Date	10th July 2021
Time	11.00 AM - 12.30 PM
Abstract	Many insects such as ants, bees, wasps and termites organize themselves into societies with the division of labor, communication, conflict, cooperation and altruism. Insect societies resemble human societies in many ways and are arguably more efficient than ours in some ways. They sustainably harvest environmental resources, engineer their environments both inside and outside their nests, practice agriculture, fight disease with a combination of individual and social immunity, organize social hunting parties, navigate their environment using terrestrial and celestial cues and majorly influence the evolutionary trajectories of other organisms such as flowering plants. So, can we humans learn anything from insect societies? In this talk I will attempt to answer this question in the affirmative, but with caution. I will consider such relatively non-controversial topics as communication, agriculture, and robotics but also some relatively controversial topics such as cooperation, conflict, collective decision making, and
Open to all	It's public talk. Open to all
Speaker	PROF. RAGHAVENDRA GADAGKAR DST Year of Science Chair Professor, Centre for Ecological Sciences, Indian Institute of Science (IISc), Bangalore



### **Profiles of Speaker**

#### Brief information about the speaker



Prof. Raghavendra Gadagkar, Ph.D. (Indian Institute of Science, Bangalore, 1979), studies Animal Behaviour, Ecology and Evolution and is especially interested in the origin and evolution of social life in animals. Gadagkar is Non-Resident Permanent Fellow of the Wissenschaftskolleg zu Berlin. He has published over 350 research papers, articles and three books, Survival Strategies (Harvard University Press, 1997), The Social Biology of Ropalidia (Harvard University Press, 2001) and how to Design Experiments in Animal Behaviour (Open-access e-book, Indian Academy of Sciences, 2021). He has been recognized by several awards including the Shanti Swarup Bhatnagar Prize, the Third World Academy of Sciences award in Biology and the Cross of the Order of Merit of the Federal Republic of Germany. He is a fellow of the Indian Academy of Sciences, the Indian National Science Academy, the National Academy of Sciences, India, The World Academy of Sciences, Leopoldina, The German National Science Academy, International Member, National Academy of sciences, USA and Foreign Honorary Member, American Academy of Arts and Sciences. He has served as a member of several committees including the Scientific Advisory Committee to the Cabinet, Government of India.

#### About the Organizer



**The Pune Knowledge Cluster (PKC)** has been established by the Office of the Principal Scientific Adviser to the Government of India. It aims is to bring together academia, R&D institutions, and the industry of Pune and its surrounding areas, to address the challenging problems of the region through innovative means, using scientific knowledge and engaging highly skilled human resources.

PKC is administered by the Inter-University Centre for Astronomy and Astrophysics (IUCAA). In the initial phase, PKC would focus on Health, Sustainability and Environment, Sustainable Mobility, BIG Data and AI and Capacity Building For more information, visit: https://www.pkc.org.in/