

Name	Dr. G. R. Kulkarni
Qualification	M.Sc., Ph.D
Designation	Director, School of Basic Medical Science, University of Pune, Pune - 411007 & Reader, Department of Physics, University of Pune, Pune - 411007
Specialization	Biophysics, Neurophysics
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1 Education

	Course	Institution	Year
1	Ph.D (Physics)	Department of Physics, University of Pune	1986
2	M.Sc (Physics)	University of Pune	1981
3	B.Sc (Physics)	University of Pune	1979

2 Career Profile

	Organisation / Institution	Designation	Duration
1	Fergusson College	Lecturer	1985- 86
2	Department of Physics, University of Pune	Lecturer	1986- 95
3	Department of Physics, University of Pune	Reader	1996 onwards

3 Teaching Experience (Subjects/Courses Taught)

One year at Fergusson college (Physics at B.Sc. level)
20 years at Department of Physics, University of Pune.

4 Research Interests / Specialization

• Biophysics, Medicalphysics and Neurophysics	• Information Processing in Sensory System	• Biomedical Signal Analysis, Wavelet Transforms and its applications to evoked potentials in human auditory and visual systems	• Experimental Neurophysiology: Intracellular and extracellular electrophysiological responses from insect visual systems
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5 Honors & Awards

National Science Talent Scholarship from 1976 to 1986

6 Publication - Books, Journals, Articles

	Year of Publication	Title	Co-Author
1	2007	Differential sensitivity of polytene nuclei to Nd:YAG laser	Srikanya Kundu, G.R. Kulkarni, B.B.Nath
2	Dec-08	Significant Enhancement of Magnetotactic bacterial yield in a modified MSGM medium in simple laboratory environment without modification of the magnetosomes properties	Srikanya Kundu, Arun G. Bnapurkar, S. B. Ogale, Gauri R. Kulkarni
3	Dec-08	On the change in bacterial size and magnetosomes features for Magnetospirillum magnetotacticum (MS1) under high concentration of Zinc and Nickel	Srikanya Kundu, Anup. A. Kale, Arun G. Banpurkar, Gauri R. Kulkarni, Satish B. Ogle
4	To be Submitted	Applications of nanoparticles of γ -Fe ₂ O ₃ for hyperthermia in E.coli by Nd:YAG laser	Srikanya Kundu, Harshada Nagar, S D Kulkarni, Renu Pasricha, A K Das, G R Kulkarni and S V Bhoraskar

5	To be Submitted	Optical trapping of Magnetospirillum magnetotacticum (MS-1)	Vivek S. Jadhav, Srikanya Kundu, G. R. Kulkarni, A. G. Banpurkar
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7 Publication - Conference Presentations

1	2005	Effect of Laser radiation on polytene chromosomes of Chironomus ramosus	Srikanya Kundu, G R Kulkarni, B B Nath
2	2006	An application of nano iron-oxide synthesized by arc plasma in swage treatment	Srikanya Kundu, Harshada Nagar, A K Das, G R Kulkarni, S V Bhoraskar
3	2009	Effect of ZnO and TiO ₂ particle on E-coli growth curve.	Anuradha Beedkar
4	2009	Magnetic Properties of Magnetotactic Bacteria	Wasim Amin Sayyad

8 Professional Societies Memberships

Life memberships of Indian Biophysics Society, Biomedical Engineering Society, Society for

9 Public Service / University Service / Consulting Activity

Worked on organizing committee of Indian Biomedical Symposium February 1992 / 1995

Secretary of Indian Physics Association Pune Chapter 1992 - 94

Coordinator of Optometry Courses

Member Academic Council, University of Pune.

10 Projects (Major Grants / Collaborations)

Collaborated for research in Application of Wavelet Transforms to Evoked Potentials, with I Seven project schemes completed by DAE-BRNS & DST

11 Other Details

Visited University of Bremen under Poona Bremen Exchange Programme in 1989 to study

Participated in the College of Neurophysics at International Centre for Theoretical Physics.

Participated in the college on Advanced Experimental Technique in Biophysics at Internati

Details
First Class
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<ul style="list-style-type: none"> • Application of Neural Networks for modeling the visual system of insect 	<ul style="list-style-type: none"> • Optical Tweezers for biophysical application 	<ul style="list-style-type: none"> • Magnetic Nanoparticles from Magnetotactic bacteria
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Book/Journal/Article

International Journal of Biological and Chemical Science

Communicated to Experimental Biology

Communicated to Nanotechnology



Best poster in “National Symposium On Recent Trends in Molecular and Medical Biophysics
BEST PAPER - DAE-BRNS PSI Symposium on power Beam For Clean Environment and Process
Oral Presentation at IBS-09
Poster Presentation at IBS-09

r Neuroscience, Third World Organization of woman Scientists.

Dr. Vincent Samar and Dr. Ila Parasnis from Rochester Institute of Technology (Nov. '93 to Feb.'94)

r electrophysiological responses from the optic tectum of frog using pattern stimuli.

. Trieste, Italy (1-20 October 1990)

ional Centre for Theoretical Physics (20 Sept – 30 Oct 1992)