

BIODATA

Name: Dr. Prafullachandra Vishnu Sane
Designation: Former Director,
National Botanical Research Institute,
Lucknow
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Date of birth: 24th December, 1937



Educational Qualification:

Degree/Diploma	Class/Grade	University	Year
B.Sc. (Agr.)	First, Stood first	Nagpur	1958
M.Sc. (Agr.)	First, Stood first	Nagpur	1960
Ph.D. (Plant Biochem.)		University of Alberta, Edmonton, Canada	1968

Employment Records:

Assistant Director Indian Standards Institution, New Delhi 1961-64
Scientist Bhabha Atomic Research Center Bombay 1972-83
Dy. Director National Botanical Research Institute, Lucknow 1983
Acting Director National Botanical Research Institute, Lucknow 1983-84
Director National Botanical Research Institute, Lucknow 1984 to 1997

Fellowships:

1. Fellow, Indian National Science Academy, New Delhi
2. Fellow, National Academy of Sciences, Allahabad
3. Fellow, National Academy of Agricultural Sciences, N. Delhi
4. Fellow, Indian Academy of Sciences, Bangalore

5. Fellow, Maharashtra Academy of Sciences, Pune

Membership of Learned Societies and organizations:

Life Member Indian Photobiology Society (Also acted as its President for one term)

Life Member Society for Plant Physiology and Biochemistry (Also was its President for one term)

Life Member Society of Biological Chemists of India

Member Scandinavian Society of Plant Physiology

Distinctions, Honours and Awards:

Several awards including

1. Shanti Swarup Bhatnagar award during 1981
2. UGC National Lectureship for the year 1986-87
3. Best Scientist of the Year award by Bharat Jyoti 1991
4. Birbal Sahni Medal of Indian Botanical Society, 1994
5. Elected member of the Board of Trustees of International Legume Database and Information services

Consultancies

- 1 Consultant for the project on Biotechnology and Tissue Culture in Brunei of the Commonwealth Fund for Technical Cooperation, Commonwealth Secretariat, London, U.K.
- 2 Member Expert group of the Commonwealth Science Council Biological Diversity and Genetics Resources Network, London, U.K.
- 3 Consultant leading business house for commercial Biotechnology (1993 onwards)

Coordinator Research (past)

1. Coordinator, Centre for Plant Molecular Biology
2. Coordinator, Biomass Research Centre (Sponsored by Ministry of Non Conventional Energy Sources, Govt. of India)
3. Coordinator, Transgenic Cotton Project of Department of Biotechnology, Govt. of India

Membership of Committees (Past):

1. Member of the expert committee of the National Biotechnology Board

2. Member of the committee for Plant Physiology and Biochemistry set up by DST under Thrust Area Program
3. Member of the expert committee of the ICAR on Plant Physiology and Biochemistry
4. Member of the committee of INSA set-up to prepare State-of-Art report on Photosynthesis and Productivity
5. Member of the committee set up by the Dept. of Environment for conservation of endangered species
6. Member of selection committees for different senior academic and other posts advertised by universities, ICAR, CSIR, DBT, etc
7. Member of ad-hoc committees set up by different agencies to look into special projects from time to time
8. Functioned as expert member of the DST, DAE agencies
9. Member of a UNEP committee as an evaluator for the project
10. Member of ILDIS Board of Trustees
11. Recognized Ph. D. guide of several universities, reviewer of manuscripts of national and international journals, etc.

Experience (Research & Teaching):

I. Research experience

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| In U S | Assistant Research Botanist I. 1968 1971 (Post-doctoral), Department of Botany, University of California, Berkeley, California, U.S.A. |
| In Germany | As a Guest Scientist of European Molecular Biology Organization, at the Ruhr University, May-August 1971 Bochum, Institut fur Biochemie der Pflanzen, Ruhr universitat 4630 Bochum, West Germany |
| In Germany | As a Senior Fellow of the Alexander Von Humboldt Foundation at the Ruhr University, Bochum and Regensburg University, Regensburg, West Germany |
| In India | Bhabha Atomic Research Centre, Bombay 1972-1983 As Head, Agricultural Biochemistry Section, Biology & Agriculture Division BARC, Bombay-400 085 |
| In India | National Botanical Research Institute, Lucknow; Since June 1983 as Scientist F; since Sept. 21, 1983 as Acting Director and as Director from Sept. 24, 1984 till 1997 |

II. Teaching Experience:

In Canada	Instructed Biometrics Laboratories during 1965-66, 1966-67 and 1967- 68 academic sessions at the University of Alberta, Edmonton, Canada
In India	In BARC taught Photosynthesis to the Training School candidates of Biology group of BARC for 3 years and biochemistry lectures to the M. Sc. (Biochem) students of Bombay University

Publications

1. Over 150 research publications in national and international journals including contributions in books
2. Edited 5 books
3. Citation classics: The review appearing in "Annual Review of Plant Physiology, 22: 395-430 (1971)

List of Publications since 2001

Ivanov AG, Hurry V, Sane PV, Oquist G and Huner NPA (2008) Reaction centre quenching of excess light energy and photoprotection of photosystem II. *Journal of Plant Biology* 51: 85-96

Ivanov AG, Krol M, Zeinalov Y, Huner NPA and Sane PV (2008) The lack of LHCII proteins modulates excitation energy partitioning and PS II charge recombination in F2 chlorina mutant of barley. *Physiol Mol Biol Plants* 14: 205-215

Ivanov AG, Krol M, Selstam E, Sane PV, Sveshnikov D, Park YI, Oquist G and Huner NPA (2007) The induction of CP43 ' by iron-stress in *Synechococcus* sp PCC 7942 is associated with carotenoid accumulation and enhanced fatty acid unsaturation. *Biochim Biophys Acta – Bioenergetics* 1767: 807-813

Pocock T, Sane PV, Falk S and Huner NPA (2007) Excitation pressure regulates the activation energy for recombination events in PSII reaction centres of *Chlamydomonas reinhardtii*. *Biochem and Cell Biol* 85: 721-729

Patil AB, Singh AK, Singh VP and Sane PV (2007) Induction of *in vitro* storable microbulbs of onion (*Allium cepa* L.) with reference to their *in vivo* storability, viability and field performance. *Physiol Mol Biol Plants* 13: 155-161

Ivanov AG, Sane PV, Krol M, Gray GR, Balseris A, Savitch LV, Oquist, G and Huner NPA (2006) Acclimation to temperature and irradiance modulates PSII charge recombination. *FEBS Letters* 580: 2797-2802

Ivanov AG, Sane P, Hurry V, Krol M, Sveshnikov D, Huner NPA and Oquist G (2003) Low temperature modulation of the redox properties of the acceptor side of photosystem II: photoprotection through reaction centre quenching of excess energy. *Physiologia Plantarum* 119: 376-386

Sane PV, Ivanov AG, Hurry V, Huner NPA and Oquist G (2003) Changes in the redox potential of primary and secondary electron-accepting quinones in photosystem II confer increased resistance to photoinhibition in low-temperature-acclimated *Arabidopsis*. *Plant Physiology* 132: 2144-2151

Raghavendra AS, Sane PV and Mohanty P (2003) Photosynthesis research in India: transition from yield physiology into molecular biology. *Photosynthesis Research*. 76: 435-450

Dixit R, Trivedi P, Nath P and Sane PV (2002) Characterization of *petB* and *petD* genes of the *Populus deltoides* chloroplast *psbB* operon. *Plant Molecular Biology Reporter* 20: 357-368

Sane PV, Ivanov AG, Sveshnikov D, Huner NPA and Oquist G (2002) A transient exchange of the photosystem II reaction center protein D1 : 1 with D1 : 2 during low temperature stress of *Synechococcus* sp PCC 7942 in the light lowers the redox potential of Q(B). *J Biological Chemistry* 277: 32739-32745

Ivanov AG, Sane PV, Zeinalov Y, Simidjiev I, Huner NPA and Oquist G (2002) Seasonal responses of photosynthetic electron transport in Scots pine (*Pinus sylvestris* L.) studied by thermoluminescence. *Planta* 215: 457-465

Ivanov AG, Sane PV, Zeinalov Y, Malmberg G, Gardstrom P, Huner NPA and Oquist G (2001) Photosynthetic electron transport adjustments in overwintering Scots pine (*Pinus sylvestris* L.) *Planta* 213: 575-585

Chapters in Books

Huner NPA, Ivanov AG, Sane PV, Pocock T, Krol M, Balseris A, Rosso D, Savitch LV, Hurry VM and Oquist G (2004) Photoprotection of Photosystem II :Reaction center quenching versus antenna quenching. In *Photoprotection, Photoinhibition, Gene Regulation, and Environment* (eds: Demmig-Adams B, Adams III WW and Mattoo A) pp 155-173 Springer

Sane PV (2004) Thermoluminescence : A technique for probing photosystem II. In *Methods in Molecular Biology* (Ed Carpentier R) *Photosynthesis Research Protocols*. Humana Press Inc, Totowa, NJ pp 229-248.

Sane PV (2003) Thermoluminescence – A probe for photosystem II. *J Plant Biology (India)* 30: 151-162