


Title	Dr.	Name	Alka Vyas	Photograph
Department	S. S. in Microbiology, Vikram University, Ujjain			
Designation	Professor and Head			
Address	Office Address: Vagdevi Bhavan, Vikram University, Academic Campus, Ujjain (M.P.) - 456010 Home Address: 96, Vyas Nagar (Near Rishi Nagar Extn.), Ujjain. 456 010. (M.P.)			
Phone- Office	0734 - 2511306			
Residence	0734 - 2518125			
Mobile	094 254 37814			
E-Mail	alka_vyas_in@yahoo.com			
Educational Qualifications				
Degree	Institution			
Ph.D.	Indian Institute of Sciences (I. I. Sc.), Bangalore.			
PG	Indian Agricultural Research Institute (IARI), New Delhi			
UG	Hansraj College, Delhi University, New Delhi.			
Others	<ul style="list-style-type: none"> • CSIR – UGC NET Cleared • PDF from University of British Columbia, Vancouver Canada. • Scientist in Fast Track Research Project of Department of Science and Technology, Govt. of India, Delhi. 			
Career Profile				
<ul style="list-style-type: none"> • At present Professor, Microbiology, Vikram University, Ujjain Previous positions held • Reader of Microbiology in Banasthali University, Banasthali (Rajasthan) • Education Officer (Promoted as Deputy Secretary) in UGC – CRO Bhopal. 				
Area of Interest/ Specialization				
<ul style="list-style-type: none"> • Microbial Genetics and Biotechnology • Microbial Ecology and Environmental Microbiology 				
Subjects Taught				
<ul style="list-style-type: none"> • Microbiology 				

Publication Profile

Research Papers:

(A). Journal Papers:

International:

- Pandit, A. (1993). Germination of *mcm* microconidia of *Neurospora crassa*. *Fungal Genet. Newsl.* 40, 63.
- Pandit, A. and Maheshwari, R. (1993). A simple method of obtaining pure microconidia in *Neurospora crassa*. *Fungal Genet. Newsl.* 40, 64-65.
- Maheshwari, R., Pandit, A. and Kannan, B. (1994). Senescence in strains of *Neurospora* from South India. *Fungal Genet. Newsl.* 41, 60.
- Pandit, A. and Maheshwari, R. (1994). Presence of nuclei carrying a recessive lethal gene in a wild isolate of *Neurospora*. *Fungal Genet. Newsl.* 41, 66.
- Pandit, A. and Maheshwari, R. (1994). Sexual reproduction by *Neurospora* in nature. *Fungal Genet. Newsl.* 41,67-68.
- Pandit, A. and Maheshwari, R. (1996). Life-history of *Neurospora intermedia* in a sugar cane field. *J. Biosci.* 21, 57-79.
- Pandit, A. and Maheshwari, R. (1996). A demonstration of the role of *het* genes in heterokaryon formation in *Neurospora* under simulated field conditions. *Fungal Genet. Biol.* 20, 99-102.
- Pandit, A., Delhi, P. and Maheshwari, R. (1997). Syntrophic growth of auxotrophic strains of *Neurospora crassa* by cross-feeding. *Fungal Genet. Newsl.* 44, 37-40.
- Navaraj, A., Pandit, A. and Maheshwari, R. (2000). Senescent: A new *Neurospora crassa* nuclear-gene mutant derived from nature exhibits mitochondrial abnormalities and a 'death' phenotype. *Fungal Genet. Biol.* 29, 165-173.
- Pandit, A. Dubey, P. S. and Mall, S. (2000). Sexual reproduction of yellow ecotype of *Neurospora intermedia* in nature. *Fungal Genet. Newsl.* 47, 81-82.
- Vyas H., Vyas A. and Mutha A. (2007). Removal of copper from aqueous solution using *Neurospora intermedia*. *J. Env.Res. and Dev.*, Vol. 2, No.1; 28-33.
- Mutha A., Vyas A. and Vyas H. (2008). A study on impact of some social evils and drinking during tuberculosis at villages of Ujjain (India). *J. Env. Res. and Dev.*, Vol. 2, No.4; 664-668.
- Vyas H., Vyas A. and Mutha A. (2009). Mutagenesis of *Neurospora* culture to improve copper removal efficiency from aqueous solutions. *J. Env. Research and Dev.*, Vol.3, No. 4; 1128 - 1133.
- Vyas H., Vyas A. And Khan R. (2009). A study of land degradation due to brick industries in Ujjain (India). *J. Env. Research and Dev.*, Vol.3, No. 4; 1174 - 1177.
- Mukati A., Vyas H. and Vyas A. (2012). A study of natural population of *Neurospora* and isolation of novel morphological mutants. *J. Env. Res. and Dev.*, Vol. 7, No.2A; 923-934.
- Gang A, Vyas H., Reddy P. B. and Vyas A. (2012). A study of cobalt resistant strains of *Neurospora intermedia* from Ujjain. *Trends in Biotech. Res.* Vol. 1, No. 2; 31 - 34.
- Gang A, Vyas H., and Vyas A. (2013). A study of heavy metal toxicity on germination and seedling growth of Soybean. *SSJBt.* Vol. 1 No. 2; 05 - 09.
- Gang A., Vyas H. And Vyas A. (2013). Toxic effects of heavy metals on germination and seedling growth of wheat. *J. Env. Res. and Dev.*, Vol. 8, No.2A; 206-213.

- Vyas A., Mukati A. and Vyas H. (2014). Identification and characterization of Ujjain-1: A new morphological mutant of *Neurospora crassa*. *J. Env. Res. and Dev.*, Vol. 8, No.3A; 619-624.
- Mukati A., Vyas H. And Vyas A. (2015). Identification and characterization of a new branching mutant of *Neurospora intermedia* from nature. *Fungal Genetics Reports*, 61: 1 - 8.
- Vyas H and Vyas A. (2015). Off-pipe building: A hypothetical Model for solving water crisis. *Life Sc. Int. Res. Jou*, Vol.2 (1); 299 - 300.
- Gang A., Vyas H and Vyars A. (2015). Effect of fungicide (CuSO₄) on growth and morphology of *Neurospora* *Life Sc. Int. Res. Jour*, Vol.2 (1); 395 - 399.
- Mukati A., Vyas A. And Vyas H. (2015). A new mutant of *Neurospora crassa* (Vu-82) having defects in branching and tip growth. *J. Env. Res. and Dev.* (Accepted).

National:

- Alka and R. K. Chopra. (1995). Influence of temperature on germination and seedling growth and its relationship with amylase activity and respiration in wheat varieties differing in temperature tolerance. *Indian J. Exp. Biol.* **33**, 775-779.
- Vyas H. and Vyas A. (2015). Land encroachment and environmental economics in relation to transportation: A case study in Ujjain city. *Kal. Res Jour.*, Vol 1 (1); 88 - 94.
- Qureshi N., Vyas A. and Vyas H. (2015). Development of wetlands for ecotourism: A case study in Ujjain city with special reference to Vishnu sagar. *Kal. Res Jour*, Vol 1 (2); 71 - 74.

(B).Papers in Conferences:

International:

- Pandit, A. & Griffiths, A. J. (2001). Identification of a novel invertase in the yellow ecotype of *Neurospora intermedia*. Poster presented in XXI Fungal Genetics Conference, California, USA. Abstract published in the proceedings of conference, pp.60.
- Pandit A. & Griffiths, A. J. (2001). Morphological mutants of *Neurospora* from nature. Poster presented in XXI Fungal Genetics Conference, California, USA. Abstract published in the proceedings of conference, pp.145.
- Vyas H. and Vyas A. (2010). Domestic sewage management: Application of ammonia volatilization for removal of ammonium nitrogen. Paper presented in 3rd ICER organized by University of Mauritius Reduit, Mauritius from 16- 18 Sept. 2010.
- Mukati, H. Vyas and A. Vyas (2011). Study of growth defective mutants of *Neurospora*. Paper presented in 4th ICER organized by SVNIT, Surat from 15 – 17 December 2011.
- Vyas H. And Vyas A. (2011). Mass Balance of Nitrogen after Sewage Irrigation in Plant – Soil System. Paper presented in 4th ICER organized by SVNIT, Surat from 15 – 17 December 2011.
- Vyas A. (2012). A study of natural population of *Neurospora* in (M. P.) India and isolation and characterization of growth defective mutants. Invited lecture presented in University Malaysia Terengganu, Malaysia from 22 -24 November 2012.

- Gang A., H. Vyas and A. Vyas (2013). Effect of fungicide on growth and morphology of *Neurospora*. Paper presented in international conference organized by Maulana College of Arts, Science and Commerce Aurangabad from 19 – 21 December 2013.
- Vyas H. And Vyas A. (2013). Water crisis and desertification. Paper presented in international conference organised by Maulana College of Arts, Science and Commerce Aurangabad from 19 – 21 December 2013.
- Vyas H. And Vyas A. (2014). IPR and sluggishness of our academic and research institutions. Paper presented in International Conference organised by Vikram University, Ujjain from 18 - 20 September 2014.

National:

- Pandit A. (1999). Occurrence of Nuclei with Recessive Lethal Mutation in Wild Strains of
- *Neurospora*. Paper presented in National Symposium on “Plant Physiology and Biochemistry in Relation to Agriculture and Environment” in DAVV, Indore during Feb.
- 1999.
- Pandit A. and Vyas, H. (2003). Study of yellow ecotype of *Neurospora* in nature. Delhi
- The Journal of Indian Botanical Society. 82 (sup), 15 (Abstract).
- Vyas A. and Vyas H. (2004). Distribution of *Neurospora* in soil samples of Ujjain. Paper
- presented in proceedings of conference held on recent trends in the field of microbiology with special reference to microbial genetics from 11th to 12th December 2004, Dewas.
- Vyas A. and Vyas H. (2006). Role of invertase in substrate preference. Abstract published
- in National conference on role of plant physiology and biotechnology in biodiversity conservation and agricultural productivity. P 33. Jaipur.
- Vyas H. and Vyas A. (2006). Use of *Neurospora* cultures in bioremediation of copper. Paper presented in National conference on biotechnology, science and environment held on 28th – 29th December 2006 and organized by department of biotechnology, DAVV, Indore.
- Vyas H., Vyas A. and Mutha A. (2007). Improvement of strains of *Neurospora* by mutagenesis for bioremediation of copper. Paper presented in National Congress of Science and Environment held at Udaipur on 17th-18th Nov. 07.
- Mukati, H. Vyas and A.Vyas (2011). Study of *Neurospora* in nature in Ujjain. Paper presented in 2nd M.P. Women Science Congress organised by MPCST, Bhopal from 22 – 23 December 2011. pp 1.
- Gang A., H. Vyas and A.Vyas (2011). Effect of cobalt on seed germination and seedling growth of wheat. Paper presented in 2nd M.P. Women Science Congress organised by MPCST, Bhopal in Ujjain from 22 – 23 December 2011. pp 4.
- Nagar R., H. Vyas and A.Vyas (2011). Preliminary study of bacteria in cow dung sample from Ujjain. Women Science Congress organised by MPCST, Bhopal from 22 – 23 December in Ujjain 2011. pp 25.

- Vyas H. Vyas A. and Soni D. K. (2014). Water supply and disposal system with special reference to Ujjain city. Paper presented in national conference organized by Govt. Madhav Science College, Ujjain (M.P.) from 3 - 4 March 2014.
- Vyas H. And Vyas A. (2014). Green technology for water management. Invited lecture presented in National Conference organised by Moolaji Jaitha College, Jalgaon. From 30 - 31 January 2014.
- Vyas H and Vyas A. (2014). Water crisis and its conservation. Invited lecture presented in National Conference organised by National Academy of Sciences and MPCST, Bhopal in Khajuraoh from 1 - 2 February 2014.
- Sharma H, Vyas H. and Vyas A. (2014). Study of fungal flora in temples of Ujjain. Paper presented in National Conference organised by National Academy of Sciences and MPCST, Bhopal in Khajuraoh from 1 - 2 February 2014.
- Vyas A. (2014). Different Evaluation techniques of examination. Invited paper presented in state level conference organised by Govt. P. G. College, Neemuch (M.P.)
- Vyas H. And Vyas A. (2014). Role of living machine in bioremediation. Paper presented in National Conference organised by Govt.P. G. College, Satna (M.P.).

Research Guidance

Supervision of awarded Doctoral Thesis:

02

Supervision of Doctoral Thesis, under progress:

06

Conferences Organized

- 03 Days Workshop on “Microorganisms: Let us Observe and Learn” in collaboration with MPCST, Bhopal and funded by DST New Delhi. (2012)
- 03 Days Workshop on “Microorganisms: Let us Observe and Learn” in collaboration with MPCST, Bhopal and funded by DST New Delhi. (2013)
- Organizing Secretary of International conference on “Scientific Innovation and Intellectual property laws: The Interface” (2014).

Conferences / Seminars etc. Attended

International conferences: **09**

National: **15**

Research Projects

- **Project: 01**
Name of Project: Sanctioned by Department of Science and Technology, Govt. of India, Delhi.
Position in Project: Scientist
Period: 03 Yrs (Completed)

- **Project: 02**
Name of Project: Isolation and characterization of growth defective mutants of Neurospora sanctioned by UGC, New Delhi.
Position in Project: Principal Investigator
Period: 03 Yrs + 06 months extension (Completed)
- **Project: 03**
Name of Project: Biodiversity Project . Sanctioned by MP Board of Biodiversity.
Position in Project: Link Officer
Period: 01 Yr (Completed)
- **Project: 04**
Name of Project: Identification and characterization of Gene (S) responsible for fungal growth using Neurospora as a model system. Sanctioned by MPCST, Bhopal.
Position in Project: Principal Investigator
Period: 03 Yrs (Ongoing)

Awards and Distinctions

- **INSA Young Scientist Medal** by Indian National Science Academy, New Delhi. (1998)
- **LSS Kumar Memorial Award by Indian National Science Academy (INSA) New Delhi (1998)**
- **David Perkin International Scholarship Award** by Fungal Genetics Community, California USA. (2001).
- Contributed write up for Neurospora home page on FGSC website in "**Neurospora on budget**" <http://www.fgsc.net/Neurospora/neurospora.html>
- **BOYSCOT fellowship awarded** by Department of Science and Technology, New Delhi.
- **Environmentalist of the year Award** by G. SEED and JERAD (2014)
- **National Mentor of Inspire activities** by Department of Science and Technology, New Delhi.

Association with Professional Bodies

Committees and Boards and Memberships

- Expert committee member, constituted by UGC, New Delhi, for autonomous status to Institute of Science and Technology, Kukatpally, Hyderabad. (2012)
- Chairman board of Studies, Vikram University, Ujjain.
- Chairman, Board of Examination, Vikram University, Ujjain.
- Member, Central Board of Studies, Department of Higher Education, Govt. of M. P. Bhopal.
- Member, IQAC, Vikram University, Ujjain.
- Member, Editorial Board, International Journal of Environmental Research and Development (JERAD)

- Member, Editorial Board, International Journal of Trends in Biotechnological Research(TBR)
- Fellow member of International Congress of Environmental Research.

Other Activities

Research Interests

Microbial Genetics, Environmental Microbiology

Delivered Lectures

- Vyas A. (2010). Invited Lecture in 3rd ICER organized by University of Mauritius Reduit, Mauritius.
- Vyas A. (2011). Invited Lecture in 4th ICER organized by SVNIT, Surat.
- Vyas A. (2012). Invited lecture in International conference organised by University of Malaysia Terrengannu, Malaysia.
- Vyas A. (2012). Invited lecture in Inspire workshop on Science Education Sponsored by DST, Govt. of India and organized by Awantika College, Ujjain.
- Vyas A. (2012). Invited lecture in Inspire workshop on Science Education Sponsored by DST, Govt. of India and organized by Malwa Institute of Science and technology, Indore.
- Vyas A. (2012). Invited lecture in Inspire workshop on Science Education Sponsored by DST, Govt. of India and organized by Heliose College,Ujjain.
- Vyas A. (2012). Invited lecture in Inspire workshop on Science Education Sponsored by DST, Govt. of India and organized by Takshashila College, Bhopal.
- Vyas A. (2012). Laboratory techniques in Microbiology. Lecture delivered as Master Trainer in the National workshop organised by S. S. in Microbiology, Vikram University, Ujjain.
- Vyas A. (2013). Invited lecture in international conference organised by Maulana Azad College of arts, science and Commerce, Aurangabad (India).
- Vyas A. (2013). Invited lecture in international conference organised by Govt. College, Aron M.P.
- Vyas A. (2013). Senescence in Fungi. Invited lecture is delivered in National Refresher Course organised by Dept. of Life Sciences, DAVV, Indore.
- Vyas A. (2013). Gene Silencing. Invited lecture is delivered in National Refresher Course organised by Dept. of Life Sciences, DAVV, Indore.

- Vyas A. (2013). Invited lecture in Inspire workshop on Science Education Sponsored by DST, Govt. of India and organized by Malwa Institute of Science and technology, Indore.
- Vyas A. (2013). Invited lecture in Inspire workshop on Science Education Sponsored by DST, Govt. of India and organized by Kalawati College Ashta (M.P.)
- Vyas A. (2013). Invited lecture in Inspire workshop on Science Education Sponsored by DST, Govt. of India and organized by Prashanti Institute of Science and Technology, Ujjain (M.P.)
- Vyas A. (2013). Invited lecture in Inspire workshop on Science Education Sponsored by DST, Govt. of India and organized by Vikranta Institute of Technology and Management, Indore (India).
- Vyas A. (2013). Invited lecture in Inspire workshop on Science Education Sponsored by DST, Govt. of India and organized by Shri Ramakrishna College of commerce and Science Satna (India).
- Vyas A. (2013). Lecture delivered as Master Trainer Microbial culture training is provided to school teachers in the National workshop organised by S. S. in Microbiology, Vikram University, Ujjain.
- Vyas A. (2014). Invited lecture in Inspire workshop on Science Education Sponsored by DST, Govt. of India and organized by Sant Singaji Institute of Science and Management, Sandalpur (India).
- Vyas A. (2014). Invited lecture in National conference organised by National academy of sciences India and MPCST Bhopal in Khajraoh.
- Vyas A. (2014). Invited lecture in National conference organised by Moolaji jaittha college, Jalgaon (India).
- Vyas A. (2014). Invited lecture in international conference organised by RV College of Engineering, Bangalore (India).
- Vyas A. (2014). Invited lecture in National conference on Green Chemistry and Green Engineering for Sustainable Development organised by IPS Academy, Indore (India).
- Vyas A. (2014). Lecture delivered as resource person in one week national training program organised on Geothermal Environment by Govt. Engineering College, Ujjain (India).
- Vyas A. (2014). Invited lecture in Inspire workshop on Science Education Sponsored by DST, Govt. of India and organized by Royal Institute of Science and Management, Ratlam (India).

- Vyas A. (2014). Invited lecture in Inspire workshop on Science Education Sponsored by DST, Govt. of India and organized by Shrinathji Institute of Pharmacy, Nathdwara (India).
- Vyas A. (2014). Invited lecture in Inspire workshop on Science Education Sponsored by DST, Govt. of India and organized by Gyan Ganga Institute of Technology and Management (India).
- Vyas A. (2015). Invited lecture in National Workshop on Comprehensive Protection, Conservation and Management, organised by Govt. PG College, Satna (India).
- Vyas A. (2015). Invited lecture in Inspire workshop on Science Education Sponsored by DST, Govt. of India and organized by Safal College, Suwasara (India).
- Vyas A. (2015). Invited lecture in National conference organised by Moolaji Jethaji College, Jalgaon (India).
- Vyas A. (2015). Invited lecture in National conference organised by Govt. Autonomous College, Shahdol (India).
- Vyas A. (2015). Lecture delivered as resource person in one week national training program organised on water and wastewater management for sustainable development by Govt. Engineering College, Ujjain (India).
- Vyas A. (2015). Invited lecture in National Workshop on Science for Nation Building organised by Govt. Girls College, Raisen (India).

Forthcoming Research

- Genetic mapping in Fungi
- Solid waste treatment
- Aero-Microbiology
- Microbial Bioremediation