# PUNYASHLOK AHILYADEVI HOLKAR SOLAPUR UNIVERSITY, SOLAPUR

Solapur-Pune National Highway, Kegaon, Solapur-413 255.

Office Tel. No. 0217-2351300 Email- vco@sus.ac.in



# Prof. (Dr.) Prakash A. Mahanwar

Vice-Chancellor PUNYASHLOK AHILYADEVI HOLKAR SOLAPUR UNIVERSITY, SOLAPUR Solapur-Pune National Highway, Kegaon, Solapur-413 255

Mobile:+91 7774043981 Email: vco@sus.ac.in

#### **EDUCATION:**

- Ph..D. (Tech.) in Chemical Technology, University of Mumbai, May, 1999.
- M. Sc. (Tech.) in Chemical Technology, University of Mumbai, August, 1994.
- B. Sc. (Tech.) in Plastics Technology, University of Mumbai, June, 1991.
- B. Sc. In Chemistry, Shivaji University, Kolhapur, June, 19987.

#### **ADMINISTRATIVE APPOINTMENTS**

- Director, Institute of Distance and Open Learning, University of Mumbai, August 29, 2020 till date.
- Dean, Human Resource and Development, Institute of Chemical Technology, Mumbai, February 27, 2020 August 28, 2020.
- Head, Department of Polymer and Surface Engineering, Institute of Chemical Technology, Mumbai, August 8, 2011- August 7,2014.
- Head, Department of Polymer and Surface Engineering, Institute of Chemical Technology, Mumbai, May 8, 2008 Sep temb er 1, 2009.
- Course Coordinator, Diploma in Paint Application Technology Mumbai University, Garware Institute of Career Education and Development, University of Mumbai, April 1,1999–March 31, 2009.
- Warden-Karmveer Bhaurao Patil Boys Hostel, University of Mumbai, July 1, 2001-March 27, 2004.

# **ACDEMIC APPOINTMETS**

- Senior Professor- Department of Polymer and Surface Engineering, Institute of Chemical Technology, Matunga, Mumbai April 21, 2016 -till date.
- **Professor of Polymer Technology**, Department of Polymer and Surface Engineering, Institute of Chemical Technology, (Then UDCT), Mumbai April 20, 2006- April 20, 2016.
- Reader in Polymer Technology, Department of Polymer and Surface Engineering Department of Polymer and Surface Engineering, University Department of Chemical Technology, (UDCT), University of Mumbai, April 20, 1998 – April 19, 2006.
- Lecturer in Polymer Technology Department of Polymer and Surface Engineering, University Department of Chemical Technology, (UDCT), University of Mumbai, November 5, 1993 April 19, 1998.

• Associate Lecturer in Plastics and Paints Technology, Department of Polymer and Surface Engineering, University Department of Chemical Technology, (UDCT), University of Mumbai, March 2, 1992-November 4, 1993.

#### INDUSTRIAL APPOINTMENTS

- Technical Executive- Marketing- M/s Lihash Corporation, Mumbai, June, 1987 to August, 1988.
- Chemist (R & D)- M/s Monopol Chemicals Pvt. Ltd., Mumbai, October, 1991 to February, 1992.

#### UNDER GRADUATE AND POST GRADUATE TEACHING

- Taught Multiple subjects at F. Y. B. Tech., S. Y. B. Tech., T.Y. B. Tech. and B. Tech. in Polymer Technology and Surface Coating Technology since March 1992.
- Taught Multiple subjects at M. Tech. in Polymer Technology and Surface Coating Technology since April 1998.
- Taught 'Basics of Polymer Chemistry, Paint Processing at Diploma in Paint Technology at
  - Garware Institute of Carrer Education and Development, University of Mumbai, 1999-2009.
- Visiting Faculty-Taught Surface Coating Technology at B. E. Production at K. J. Somaiya College of Engineering, Vidyavihar, Mumbai, Saboo Siddik College of Engineering, Byculla, Mumbai, Veermata Jijabai Technological Institute, Matunga, Mumbai, 1997-1999.
- Visiting Faculty: Diploma in Paint Technology, The Colour Society, Mumba, i1992-2006.
- Visiting Faculty: Diploma in Plastics Technology, Indian Plastics Institute, Mumbai, 1993-2010.

# **RESEARCH GUIDANCE:**

Completed : Ph.D.: 24 Masters: 92 Post-Doctoral: 2 Ongoing : Ph.D.: 6 Masters: 12 Post-Doctoral: 1

NUNBER OF PUBLICATIONS, PRESENTATIONS AND

**CITATIONS:** 

1	Number of Publications	Research Peer Review			
		International:115	National: 4		
		Review	I		
		International: 3	National: 80		
2	Number of conference Presentations	International: 16	National:26		
3	Number Conference Proceedings	International: 16	National: 38		
4	Book Chapters	3			
5	Indian Patents	GRANTED: 6	APPLIED:2		
6	Citations				
7	Source: Google Scholar	Citations	h- Index	i-10- index	
8	A11	2742	29	69	
9	Since 2017	1908	22	53	

# **AWARDS AND HONOURS:**

- Fellow, Maharashtra Academy of Sciences, 2015.
- Fellow, The Colour Society, 2020.
- Fellow, Indian Chemical Society, 2020.
- Awarded UGC Mid Carrier Award Grant to Faculty of Science Departments under "UGC\_BSR Mid Career Award Grant for the year 2021-2023.

### **APPOINTMENTS ON GOVERNMENT BODIES:**

- Accessor, National Assessment and Accreditation Councl (NAAC), UGC, Delhi 2020 onwards
- Expert member, Department of Sciences & Industrial Research (DSIR, New Delhi)
  TDP committee, 2011-2015
- Expert member, Department of Sciences & Industrial Research (DSIR, New Delhi) for inspection of industrial R & D facility. 2013-2016
- Expert Member, Industrial Safety Audit Committee, Government of Maharashtra, 2020.

# **INTELCTUAL PROPERTY RIGHTS:**

- ✓ PATENTS: Indian Patent Granted: 6
- Indian Pat. No 344700/2020: Synthesis of Polyether Ether Ketone Carbon Nano Platelets Composite, Bambole Vaishali Abhay and Mahanwar Prakash Anna.
- Indian Pat. No. 344423/2020: Centrifugal and Electrospinning machine for synthesis of Micro and Nano Fibers from Polymer Melts and Solutions, Mahanwar Prakash Anna and Praharaj Bhatnagar Manoj.
- Indian Pat. No. 340999/2020: Nanotube Polymer Compositions, Mahanwar Prakashh Anna and Bambole Vaishali Abhay.
- Indian Pat. No. 331179/2020: Synthesis of Polyether Sulfone and Mixture of SiO2 and Al2O3 Nanocomposites, Bambole Vaishali Abhay and Mahanwar Prakash Anna.
- Indian Pat. No.327133/2019: Microcapsule of agrochemicals and Process for Production Thereof., Mahanwar Prakash Anna and Sawant Manohar Ramchandra.
- Indian Pat. No.302315/ 2018: Water Dispersible Putty and Powder Paint, Mahanwar Prakash Anna and Dongare Raviprakash Haribhau..

# **WORKED AS CONSULTANT TO VARIOUS INDUSTRIES**

- Developed new products and processes developments for large, medium and small scale industry. All are in successful commercial operation. Name of few Industries:
  - · Asian Paints Ltd. Mumbai,
  - Kansai Nerolac Paints Ltd.,
  - Clarient (India) Pvt. Ltd,
  - · Rosari Biotech. Ltd.,
  - Finolex Industries Ltd.,
  - BSNL.
  - Stanvac (Germany),
  - Bichi Chem. (China),

 And many more for process intensification, new product development as well as trouble shooting, etc. in the field of Paint and Coatings, Polymer processing, Emulsion manufacturing, Pigment manufacturing and allied products.

# **BOOK CHAPTERS**

- M. S. Sreekanth, V. A. Bambole, S. T. Mhaske, P. A. Mahanwar, "Studies on the Effect of Concentration of Mica on Properties of Polyester Thermoplastic Elastomer Composites", Emerging Trends in Engineering Research and Technology Vol. 10: Chapter 09: Book Publisher International, Hooghly, West Bengal, India, 2020 (ISBN-13 (15)978-93-90206-84-1.
- M. B. Kulkarni, P. A. Mahanwar, "Investigating the Effect of Methyl Methacrylate- Acrylonitrile -Butadiene-Styrene (MABS) on the Mechanical and Thermal Properties of Poly (Methyl Methacrylate) (PMMA)-Fly Ash Cenospheres (FAC) Filled Composites", Emerging Trends in Engineering Research and Technology Vol. 10: Chapter 11Book Publisher International, Hooghly, west Bengal, India, 2020, ISBN-13 (15) 978-93-90206-83-4.
- R. H. Dongre, P. A. Mahanwar, "Studies in Preparation of Redispersible Powder Putty and Powder Paint", Nanomaterials Chemical, Physical and Biological Applications, Taylor and Francis Group: Apple Academic Press, Ist edition, 2018, eBook ISBN9781315365909

# **KEY NOTE SPEAKER/ RESOURCE PERSON:**

- Chief Guest- Opening Ceremony of Preliminary Round (Zone-V) of 55th Youth Festival of University of Mumbai by Sonopant Dandekar Arts, V. S. Apte Commerce and M. H. Mehta Science College, Palghar on 17th August, 2022.
- Plenary Speaker- International Conference on Nano Technology and Nano Engineering, Paris, France on July 16-18, 2018 "Polymer Bio Nano composites and their applications in tissue engineering.
- Guest Speaker- International Conference on Advances in Science and Engineering (ICASE 2017), Bangkok, Thailand, July 20-22, 2017, "Hybrid Engineering Polymer Composites and their applications'
- **Key Note Speaker** National Seminar on Materials Technology in 21st century, by Karmveer Bhaurao Patil Science college, Vashi, Navi Mumbai, October 24-25, 2016, "The Carbon element: Magical Element in Materials Technology.
- **Keynote Speaker** National seminar organized by All Plastics Recyclers Association (APRA), Mumbai, September, 15-16, 2015 "Value addition to Plastics waste via recycling.
- **Keynote Speaker** National Conference organized by Laxminarayan Institute of Technology, Nagpur, January 3-4, ,2015," Future lies in Nano Composites
- Guest Speaker:- 2ndInternational conference on Advance Material, KaSAM, Kathmandu, Nepal, April 14-17, 2014," The melt processing of Polymer Nano fibers and their applications
- Keynote Speaker- National Conference organized by Devchand College, Arjun Nagar, September 18-20, 2014, "Developments and opportunities in Polymer Science and Technology
- **Key Note Speaker** National Seminar on Packaging 2020, organized by S.I.E.S. Institute of Packaging, Nerul, Navi Mumbai September 28-29, 2013," The role of Polymer composites in Packaging Technology.

- **Key Note Speaker** National Seminar organized by University Institute of Chemical Technology, NMU, Jalgaon, February 5-6, 2012, "Green Technology: way forward.
- Resource Person- National Seminar on Green Technology and future trends organized by Dahiwadi College Dahiwadi, Maharashtra, December 12-14, 2009, "Synthesis and applications of Green Polymer additives.
- Resource Person- National Seminar on Plastics: to say Yes or No by Father agnel college of Engineering, Vashi, Navi Mumbai, October 21-22, 2007, "Safe Disposal of Plastics waste
- Resource Person- National workshop organized by N. G. Acharya College of Arts and Science, Mumbai on August 21-22, 2014, "Modern tools for Polymer and Polymer Composites characterization".

# REFEREE FOR INTERNATIONAL PRE-REVIEWED JOURNALS

- J. Thermoplastics Composites Materials,
- · J. Pigment and Resin Technology,
- J. Mineral Materials and Composites,
- J. Progressive Organic Coatings,
- J. Applied Polymer Chemistry

# EXPERIENCE OF WORKING ON THE STATUTORY

- Member, Governing Body, Fr. Conceicao Rodrigues College of Engineering, Mumbai (Vice-Chancellor Nominee), October 2019-September 2022.
- Chairman and Member: Board of Studies in Nano Science & Nano Technology, University of Mumbai, September 2018- August 2022.
- Member: Board of Studies in Chemical Engineering, University of Mumbai, September 2018-August 2022.
- Member: Board of Studies, Physics, Rayat Shikshan Sanstha's Karmveer Bhaurao Patil College, (Autonomous) Vashi Navi Mumbai, February2019-January 2022.
- Member, Research Recognition Committee in Engineering and Technology, North Maharashtra University Jalgaon, January 2013- December- 2017.
- Chairman, Research Recognition Committee in Polymer Engineering and Technology and Surface Coating Technology, Institute Chemical Technology, August 2009- September 2011 and August 2014-September 2017.
- Member, Academic Council and PGPC/UGPC committee, August 2012- August 2020.

# EXPERIENCE OF ORGANIZING EVENTS SUCH AS WORKSHOPS, SEMINARS, CONFERENCES

- Chairman, Organizing Committee, CPP 2019, Conference on Characterization of Polymers and Polymer Products 2019, at Institute of Chemical Technology, Mumbai September, 2019.
- Conveynor, Advances in Polymers and Coatings: Rangostov 2017at Institute of Chemical Technology, Mumbai, March, 2017
- Conveynor, The Colour Society International seminar 2016 at Hotel Kohinoor, Mumbai, August 2016
- Conveynor, Advances in Polymers and Coatings: Rangostov 2016, at Institute of Chemical Technology, Mumbai, March, 2016.
- Hon President and Chairman Organizing Committee, The Colour Society International Seminar 2015 at Hotel Kohinoor, Mumbai, November 2015.
- Head of the department and Chairman, Organizing Committee, Advances in Polymers and Coatings: Rangostov 2015, at Institute of Chemical Technology, February, 2015.

- Hon President and Chairman Organizing Committee, The Colour Society International Seminar 2014, April 2014.
- Head, Department and Chairman, Organizing Committee, Advances in Polymers and Coatings: Rangostov 2014 at Institute of Chemical Technology, Mumbai, January, 2014.
- Hon Secretary and Member Organizing committee, The Colour Society International Seminar 2013, at Hotel Kohinoor International, Mumbai November, 2013.
- Head of the department and Chairman, Organizing Committee, Advances in Polymers and Coatings: Rangostov 2013 at Institute of Chemical Technology, Mumbai, February, 2013.
- Member Seminar organizing Committee, The Colour Society International Seminar 2012, at Hotel Fariyaz, Lonawala, Raigad, May, 2012.

# REFRESHER AND TRAINING PROGRAMMES ORGANIZED

- Principal Co-Ordinator: Technology Gap Analysis studies and soft Technology intervention for Plastics Recyclers at Dharavi, Mumbai; Principal Programme Cocoordinator for the programme supported by DST-TIFAC: MSME, Govt. of India:
  - Organized Seminar and technical programmes for waste Platics recyclers On 28-29 December 2012, 3-4 February 2013,7-8 March 2015.
  - Television Show on Awareness of Plastics disposal, December 2012.
  - Organized Medical Camp for Plastics Recyclers: January, 2013, September 2014.
  - organized Road show at Dharavi, Malad, Mulund, Dadar, Matunga, Parel and Bandra (E) for Plastics use and safe disposal, March 2014, May 2014 and December 2015.
- Principal Coordinator for organizing Refresher courses in Resin Manufacturing and Characterization (April 24, 2011, June 20, 2012 and January 13, 2013): trained more than 150 industry personnel.
- Principal Coordinator for organizing Refresher courses for Small Scale Paint Manufacturers July 22, 2014, January 2015 Trained more than 80 paint Industry personals.
- Principal Coordinator for organizing Paint Application Training Courses for Painters: Organized 15 Training programmes for Painters and supervisors on Paint applications and Supervisors in association with M/s. Asian Paints at Garware Institute of Carrier Education and Development, Mumbai. More than 400 painters January 2, 2003- December 2, 2005.
- Principal Coordinator for organizing Paint Application Training Courses for Painters Organized 5 Training programmes for Painters and supervisors on Paint Application and Safety in association with M/s ICI Paints at Chennai, Bangalore, Delhi, Kolkata and Mumbai during April 15, 2006- February 3, 2007.

# **SEMINARS/ WORKSHOPS ATTENDED**

# INTERNATIONAL:

- 75<sup>th</sup> Years of Indo-Russian Diplomatic Relation: Reflection in Art, Culture and Literature, Moscow, Russia, September 14-15, 2022.
- 2022 International Conference on Materials and Nanomaterials (MNs-22), Rome, Italy, July 25-27, 2022.

- Nanotech France 2022 Int. Conference and Exhibition, Paris, France, June 15-17, 2022.
- 3<sup>rd</sup> International online conference on Nanomaterials (Online), April 25-May 10, 2022
- 2<sup>nd</sup> International online Conference on Polymer Science- Polymers and Nanotechnology for Industry 4.0 (Online), November 1-15, 2021.
- 27th Annual International Conference on Composites/Nano Engineering (ICCE-27), Granada, Spain, July 14-20, 2019.
- International Conference on Nano Technology and Nano Engineering, Paris, France, July 16-18, 2018.
- International Conference on Advances in Science and Engineering (ICASE 2017), Bangkok, Thailand, January 20-22, 2017.
- 24th Annual International Conference on Composites/Nano Engineering (ICCE-24), Hainan Island, China, July 17-24, 2016.
- ICMSME 2016: 18th International Conference on Material Science and Material Engineering, San Francisco, USA, September 26-28, 2016.
- 17th International Conference on Fracture, Mechanics, Polymer Composites and Adhesives; ICFMPCA 2015, Paris, France, May-18-19, 2015.
- 22<sup>nd</sup> Annual International Conference on Composites/Nano Engineering (ICCE-22), Malta, July 13-19, 2014.
- 2<sup>nd</sup> International Conference on Polymers and Chemical Engineering: (ICPC-14), Phuket, Thailand, September 29-30, 2014.
- 2<sup>nd</sup> annual IEEE International Conference on Nano/Micro Engineered and Molecular Systems, Bangkok, Thailand, January 16-18, 2007.
- 12th International Conference on Composites/Nano Engineering (ICCE -12), Spain, August 1-6, 2005.
- 14th Annual International Conference on Composites/Nano Engineering (ICCE -14), Boulder
- RadTech Europe 2005 Conference, Barcelona, Spain, October 18 –20,2005.
- 48th Annual Society of Vacuum Coaters (SVC) Technical Conference, Denver, CO, USA, April 23–28, 2005.

# NATIONAL

- International Conference on Advancements in Polymeric Materials, Bhubaneswar, Odisha, February 2-4, 2018.
- Fourth International Conference on Polymer Processing and Characterization 2018, Kottayam, Kerala, December 4-6, 2018, Kottayam, Kerala.
- PADART -2017, IIT, Mumbai, March 4-5, 2017
- International Conference on Materials for Millennium MATCON 2016, Cochin, Kerala, January 14-16, 2016.
- International Conference on Material Science and Technology, New Delhi, March 1-4, 2016.
- International Conference on Nanomaterial and Nano-Technology NANO 2015, Tiruchengode, Tamil Nadu, December 07-10, 2015.
- International Conference on Advancement in Polymer Science & Technology, Rajkot, India, February 2-5, 2014.
- 6<sup>th</sup> International Conference on environmental research, Aurangabad, Maharashtra, November 13-14, 2013.
- International Conference on Advanced Polymeric Materials (ICAPM 2013), Kottayam, Kerala, October 11-13, 2013.
- International Conference on Nanoscience and Technology 2012, ICONSAT 2012, Hyderabad, India, February 13-15, 2012.
- International Conference on Nanomaterials and Nanotechnology- NANO 2010, Tiruchengode, Tamil Nadu, December 13-16, 2010.
- National Level Conference Recent Advances In Polymer Technology (RAPT 2009), NMU, Jalgaon, Maharashtra, December, 28-29 2009.

- International Conference on Molecular Organic Electronic Devices (MOED), at GNDU University, Amritsar, Panjab, September, 22-25, 2009.
- International conference on Advances in Polymer Blends, Composites, IPNS and gels: Macro to Nano scale ICBC 2007, Kottayam, Kerala, November 19-25, 2007.
- International conference on Advances in Textile Materials Technology, Management and Applications, Kumaraguru College of Technology, Coimbatore. India, July 7-8, 2005.
- International Conference on Advances in Polymer Blends, Composites, IPNS and Gels: Macro to Nano Scale ICBC 2005, Kottayam, Kerala, March 21-23, 2005.
- Eureka-2004- National Level Technical Event organized by T. K. I. E. T, Warananagar (Kolhapur), February 12-13, 2005.
- National Seminar on Emerging Trends in Polymer Engineering, Kottayam, Kerala, March 18-19, 2004.
- International Seminar on Advances in Polymer Technology, Cochin, January 16-17, 2004.
- International Seminar on Advances in Polymer Technology, Cochin, December 13-14,2002.

# PROFESSIONAL AFFILIATIONS:

#### International:

- Vice-President, Recycling and Sustainable Development Division- India, German Indian Plastics and Polymers e.V., Feb. 10, 2022 -till date
- President- India Trade and Culture of the European Trade and Culture, European Indian Trade and Culture e.V. January 20, 2022- till date.
- Global Group Associate Editor and Advisory Board Member for all Group Publications in Modern Plastics India and other 30 countries Modern Plastics Global Network (Chrysolite Media Private Ltd), October 19, 2018 -till date.
- · Honorary Research Fellow, University Of Auckland, School of Engineering, New
- Member, International Society of Roto-molding, New Zealand, December 2007-November, 2008.
- Member, Society of Vacuum Coaters, USA, November 2006- October 2007 National:
  - Hon. President: Recycler's foundation (December 2017- September 2022)
  - Hon. President, The Colour Society (April 2013- August 2015)
  - Hon. Secretary, All Plastics Recyclers Association (APRA), Mumbai (January 2014-July 2018)
  - Hon. Secretary, The Colour Society (April 2006 March 2014, April 2020- March 2022)
  - Hon. President (Western Region), Indian Paint and Coating Association (IPCA), August 2015-September 2017.
  - Chairman- Technical Committee (ISSPA- Central), Indian Small Scale Paint Association (ISSPA), August 2016- July 2018.
  - Member, Governing Council and Executive Council, Indian Centre of Plastics in Environment (ICPE), May 2014- July 2022).
  - Member, Board of Governors, UDCT Alumni Association, Mumbai, April 2012-May 2014

# AFFILIATION WITH NATIONAL/ INTERNATIONAL PROFESSIONAL BODIES

- · Life Member, Indian Plastics Institute
- · Life Member, Society of Polymer Science
- Life Member, The Colour Society
- Life Member, Society of Industrial Chemist
- Life Member, UDCT Alumni Association
- Life Member, NESM Alumni Association
- Honorary Member, All India Plastics Manufacturer's Association
- Honorary Member, Indian Resin Manufacturer's Association
- Honorary Member, All India Printing Ink Manufacturer's Association
- Honorary Member, Indian Paint Association
- Honorary Member, Indian Small Scale Paint Association
- Honorary Member, Indian Paint and Coating Association
- Member, Paint and Coating Technologist Association.

# **AFFILIATION WITH SOCIAL BODIES**

- Life Member, and Past President, Dharmanath Charitable Trust, Pune, December 2017-December 2021.
- Past President\_ Institute of Chemical Technology Academic Staff Association. January 2018-December 2019.
- Life Member, BANE, January 2014 onwards.