## Innovation and Incubation activities of Research Centres

- Physics research centre is a well-equipped Laboratory for organic & inorganic material Research. The centre have been maintaining research facilities by the instruments such as Physical Vapour deposition by the vacuum pump (Hind High Vacuum) Spray Pyrolysis Technique (Make: Holmark), Hydrothermal Technique, Static Gas Sensing System, Muffle Furnace, Digital one pan Balance (Make: Shimazdu), Magnetic Stirrer etc. The Research department of Physics have been maintaining research facilities through the instruments such as Physical Vapour deposition by the vacuum pump (Hind High Vacuum), UV visible Spectrophotometer (Make: BSR), Spray Pyrolysis Technique (Make Holmark), Hydrothermal Technique, Static Gas Sensing System, Muffle Furnace, Digital one pan Balance (Make: Shimazdu), Magnetic Stirrer etc. Till today fourteen research (Ph.D.) students have been degree awarded from Savitribai Phule Pune University. Till today Fourteen research (Ph.D.) students have been degree awarded from Savitribai Phule Pune University. Four Research supervisors has been guiding to research students regularly. Also Sixteen registered students doing his research regularly in this centre. Researchers have published more than 100 research papers in international reputed journals of Elsevier, Indian journal of Physics, Sensors and transducers, Luminescence, Nanosystems UGG care list and Scopus Journals.
- Research centre in Chemistry is established and recognised by SPPU Pune from 1982. More than 60 research scholars have been awarded by Ph.D. degree from our center. So far we have published more than 200 research papers in international reputed journals of American Chemical Society, Elsevier, Springer and Taylor & Francis publications. Research centre have completed Ph. D course work on Research Methodology for registered students. The center has research laboratories with wellequipped research infrastructure. The facility available includes sophisticated analytical instruments such as FT-IR, UV Visible Spectrophotometer, Rota evarator and Analytical balance etc. Department also has computer lab with internet facility. Presently we are having Seven research guides and Twenty students are currently registered in this centre.
- Research centre in Zoology is established and recognised by SPPU Pune from 2010-2011. This research centre is a well-equipped Laboratory for Toxicology and Parasiatology Research. Six research scholars have been awarded by Ph.D. degree

from our center. So far centre have published more than 50 research papers in international reputed and peer reviewed journals. Presently Three regular and Two associate research guides and 11 students are currently registered in this center. Research centre have completed Ph.D course work on Research Methodology for registered students. Zoology research centre is a well-equipped Laboratory for BOD Incubator, Blood Analyzer, Cooling Centrifuge, Automatic Tissue Processor, Cryostat Microtome, Inverted Microscope, Trinocular microscope with Camera, Autoclave, Rotary Microtome, Dissecting Microscopes, Computers with Printer and Internet facility, Phase Contrast Microscope. A number of Thesis, Magazines, Periodicals, and Reputed Journals are readily available in this Centre.

- Research centre in Geography is established and recognised by SPPU Pune from 2018-2019. Presently Seven regular and Four associate research guides and 14 students are currently registered in this center. Research centre have completed Ph.D course work on Research Methodology for registered students. An instrument like GPS Theodolite Dumpy level SOI Toposheet Aerial Photographs Auto Level Satellite images are available in the department of geography. A number of Magazines, Periodicals, and Reputed Journals are readily available in this Centre.
- Research centre in commerce and management is established and recognised by SPPU Pune from 1996-1997. Presently One regular and four associate research guides and 08 students are currently registered in this center. Thirty research scholars have been awarded by Ph.D. degree from this center. Instruments like Computer, printer and Overhead projector for PowerPoint presentations, separate reading room and library facility for research students. More than 350 old theses are available for reference in research work which was collected from Jaikar Library SPPU, Pune. latest commerce and management Journals are available to research students.
- Research centre in Marathi is established and recognised by SPPU Pune from 2021-2022. Presently Three regular and two associate research guides and 07students are currently registered in this center. Research centre have completed Ph.D course work on Research Methodology for registered students. The library facilities provided by the central library of the college. In this facilities such as reference books of Marathi literature, as well as daily and weekly magazines useful for research. Computers, Printers and an LCD projector is available and is being used by research students.

- Research centre in Hindi is established and recognised by SPPU Pune from 2021-2022. Presently Three regular and one associate research guides and 08 students are currently registered in this center. Research centre have completed Ph.D course work on Research Methodology for registered students. The library facilities provided by the central library of the college. In this facilities such as reference books of Hindi literature, as well as daily and weekly magazines useful for research
- Research centre in Botany is established and recognised by SPPU Pune from 2022-2023. Presently Three regular research guides working in this center. This research centre is a well-equipped Laboratory for Spectrophotometer, Flame Photo meter, Herbarium Cabinet, Sox late Apparatus, Oven and Laminar Air flow, Trinocular microscope with Camera, Autoclave, Dissecting Microscopes, Computers with Printer and Internet facility, Phase Contrast Microscope. A number of Magazines, Periodicals, and Reputed Journals are readily available in this Centre.
- Research centre in Psychology is established and recognised by SPPU Pune from 2022-2023. Presently Two regular research guides working in this center. This research centre is a well-equipped Laboratory for clinical Psychology. This centre is fulfilled with required infrastructures, Computers with Printer and Internet facility. A number of Magazines, Periodicals, and Reputed Journals are readily available in this Centre.
- As an outcome, quality research work is published in reputed journals such as UGC care list and Peer reviewed as well as textbooks and reference books are also published by the faculty and scholars.
- Twelve faculties have filed six patents to their credit belonging to Chemistry, Zoology, Botany, Electronic Science, and Computer Science.
- The college library is well-resourced with research journals and reference books to facilitate and update the knowledge of research work. INFLIBNET, e-Books, manuscripts, etc, provided to the researchers for updating the recent developments in the relevant fields.
- Various collaborations and linkages are established with variegated social, industrial, and educational institutes and industries to avail the facility and expand the knowledge in related fields.
- IKS: Malegaon City being the hub of handloom industry, many of our students learn conventional skills by practically working at the handloom sites. On the

handloom products, the further processes like painting, pressing, knitting, weaving, dying, designing on sarees, *lungis* require conventional art and craft skills concerned. All these skills are also being learnt by the students to preserve the Indian Cultural Heritage and to earn bread and butter for family by working part time. The skill of operating Indian Conventional *Charkha* is being also learnt. The students are always appreciated and motivated for the same.