

K. J. Somaiya College of Science and Commerce
Autonomous – Affiliated to University of Mumbai
Vidyavihar, Mumbai – 400077
Reaccredited ‘A’ grade by NAAC

Best Practices for the Academic year 2019-2020

I. Title of the practice: International Relations and Industry Academia Collaboration

1. Objectives of the practice:

1. To create a platform to establish international relations with other universities.
2. To establish academic and research-based collaborations with industries.
3. To encourage the learners to imbibe 21st century global skills for employability.
4. To inculcate skills in the learners, required for world-class research.

2. The context: The current status of employability and the need to mitigate the increasing gap between the demand and the availability of the vacancies, were some of the significant factors that contributed to the establishment of International Relations and Industry Academia Collaboration. There is a need to develop a rapport with the stakeholders and to obtain their feedback on the existing pattern of academic transaction. Keeping a track of the available opportunities and facilitating the interaction between the employers and the students would enable to achieve higher goals in the domain of employability.

3. The practice: Ten MoUs were signed and two linkages established, which enabled departments to collaborate with industries and establish linkages for internships. Delegates from University of Padova presented opportunities to study in Italy to Master's level students of biological sciences and other students.

Details of MoUs:

Collaborators	Area of Expertise	Key focus areas	Features
Labcare Diagnostics	Pharmaceuticals/ Diagnostic Kits	Research & funding	MoU signed.
CIFE	Aqua culture	Dissertation & research	Students completed internships through the established Linkage.
BNHS	Biodiversity	Internship & research	Students completed internships through the established Linkage.
CASI Global	Fintech trainings	Certificate courses	MoU signed
BNM Home Science	Education	Knowledge exchange	MoU signed
Iskcon Annamrita	NGO	Nutrition analysis	MoU signed
EBTS	Business IT processes training	Tally & SAP training	MoU signed
College of Home Science, Nirmala Niketan, Mumbai	Biochemistry	Academic Collaboration	MoU signed
RiiDL, SVV	Research	Research Collaboration	MoU signed

Division of Plant Pathology and Nematology, Florida Agricultural Research Institute, Florida	Research	Research and Academic Collaboration.	MoU signed
Prathamesh Biotech, Vadodara	Biopesticide and Biofertilizer Research and Industrial production	Research and Academic Collaboration	MoU signed
TATA Memorial Hospital, Mumbai	Research and Academics	Research and Academic Collaboration	MoU signed

4. Evidence of success: MoUs which were signed enabled to establish a constructive rapport for a time period to explore academic and research-based avenues. Students were able to explore different domains of research and enrol for research projects and internships. Especially post-graduate students from Science stream were able to enrol at different reputed research institutes for the dissertation project. Students were able to obtain hands-on experience and enhance their skills to work with different instruments. One student, Mr. Rajeshu Rayadu from Department of Microbiology completed internship at Labcare Diagnostics. Student was offered job after the degree. He was part of the Covid Kit development team. This Kit was approved by ICMR.

5. Problems encountered and resources required:

Equal number of opportunities for all the students at the reputed institutes emerged as a challenge in the initial stage, as the vacancies were limited. Students had to go through a process and then join as an intern.

Alignment of the syllabus with the research institute schedule was one of the problems. Predominantly the schedule of the research institute/industry was different and students had to search for other available alternatives.

There was a need to reschedule the timetable for the examination as sufficient time was required to be allotted for research projects.

Online viva-voce examinations were conducted when the students submitted their thesis.

II. Title of the practice: Empowerment of Faculty

1. Objectives of the practice:

- a. To **educate the educators** because they are the main agents of dissemination of Institutional vision-mission.
- b. To help develop the capacity building through research and innovation, establish faculty-centered methodology that supports and enhances the institutional effectiveness.
- c. The development of pedagogical practices and institutional management aiming towards continuous improvement.
- d. The various empowerment schemes contribute to the teachers in qualifying and competing with the changing trends in higher education

2. The context: For the progress of any institution professional development programs are a must. With the current times and contexts, the administrators must guarantee the opportunities for professional development of the teachers. Professional development of the educators let them respond to cultural, social, and economic needs, to name a few. Our institution is an ardent supporter of this and thus all the faculties are encouraged to join the various faculty development programs to groom their knowledge.

3. The practice: Every year the college organizes various workshops for the empowerment of the faculty, and also encourages them to attend the various workshops/ FDPs conducted by other eminent institutes.

6. Details of teachers attending professional development programs, viz., Orientation Program, Refresher Course, Short Term Course, Faculty Development Programs in 2019-2020:

Names of teachers who attended	Title of the professional development program	Date and Duration (from – to)	Department
Amit Jethwa	Induction programme (IISER, Pune)	01/05/2019 to 25/05/2019	Biotechnology
Sagar Shah	NPTEL MOOC on Introduction to Research	19/08/2019 to 15/10/2019	Biotechnology
Ketan Thatte	Faculty Development Program on Cooperative learning and E content development	25/11/2019 to 01/12/2019	Botany
Mr. JaidipWable	Induction programme (IISER, Pune)	01/05/2019 to 25/05/2019	Chemistry
Dr. Afsar Ali Siddiki	Induction programme (IISER, Pune)	01/05/2019 to 25/05/2019	Chemistry
Dr. Rohit Singh Chauhan	Refresher course in the subject chemistry and Biochemistry	17/08/2019 to 31/08/2019	Chemistry
Dr. Trupti Tawde	Refresher course in Chemical, Physical, and material science	14/06/2019 to 27/06/2019	Chemistry
Dr. Aniket Pawanoji	Refresher course in Chemical, Physical, and material science	14/06/2019 to 27/06/2019	Chemistry
Dr. Saurabh Shetye	refresher course in Chemistry	20/09/2019 to 03/10/2019	Chemistry
Dr. Dilip Kumar Yadav	Refresher course in Chemistry	31/10/2019 to 13/11/2019	Chemistry
Dr. Afsar Ali Siddiki	Annual refresher programme in Teaching by ARPIT.	01/09/2019 to 31/12/2019	Chemistry
Dr. Nanabhau Karanjule	refresher course in Chemistry	31/10/2020 to 13/11/2019	Chemistry

Mr. Jaidip Wable	Successfully completed Online International Short term course IYPT 2019.	15/10/2019 to 15/01/2020	Chemistry
Dr. Trupti Tawde	Successfully completed Online International Short term course IYPT 2019.	15/10/2019 to 15/01/2020	Chemistry
Dr. Vanita Kulkarni	Successfully completed Online International Short term course IYPT 2019.	15/10/2019 to 15/01/2020	Chemistry
Dr. NanabhauKaranjule	Successfully completed Online International Short term course IYPT 2019.	15/10/2019 to 15/01/2020	Chemistry
Dr. Chitra Kamath	Successfully completed Online International Short term course IYPT 2019.	15/10/2019 to 15/01/2020	Chemistry
Mrs. Madhavi Kate	Successfully completed Online International Short term course IYPT 2019.	15/10/2019 to 15/01/2020	Chemistry
Ms. Meenakshi Wagh	Successfully completed Online International Short term course IYPT 2019.	15/10/2019 to 15/01/2020	Chemistry
Dr. NishamolKanat	Successfully completed Online International Short term course IYPT 2019.	15/10/2019 to 15/01/2020	Chemistry
Dr. Veena Khilnani,	Successfully completed Online International Short term course IYPT 2019.	15/10/2019 to 15/01/2020	Chemistry
Dr. Vandana Jamadar	Successfully completed Online International Short term course IYPT 2019.	15/10/2019 to 15/01/2020	Chemistry
Dr. Vaijayanti Ghase	Successfully completed Online International Short term course IYPT 2019.	15/10/2019 to 15/01/2020	Chemistry

Dr. Veena Khilnani	Annual refresher programme in Teaching by ARPIT.	01/09/2019 to 31/12/2019	Chemistry
Dr. Nanabhau Karanjule	Participated in the short term course in E-content development	19/11/2019 to 25/11/2019	Chemistry
Dr. Aniket Pawanoji	Participated in the short term course in E-content development	19/11/2019 to 25/11/2019	Chemistry
Dr. Aniket Pawanoji	NPTEL -successfully completed online course in Coordination chemistry	01/07/2019 to 31/10/2019	Chemistry
Dr. Trupti Tawde	NPTEL -successfully completed online course in Stereochemistry	01/07/2019 to 31/09/2019	Chemistry
Ms.Shital Sonwane	National level FDP on E-content development	28/02/2020 to 29/02/2020	Chemistry
Dr. Nanabhau Karanjule	National level FDP on E-content development	28/02/2020 to 29/02/2020	Chemistry
Dr. Dilip Kumar Yadav	National level FDP on E-content development	28/02/2020 to 29/02/2020	Chemistry
Dr. Aniket Pawnoji	National level FDP on E-content development	28/02/2020 to 29/02/2020	Chemistry
Dr. Nishamol Kanat	National level FDP on E-content development	28/02/2020 to 29/02/2020	Chemistry
Dr. Afsar Ali Siddiki	National level FDP on E-content development	28/02/2020 to 29/02/2020	Chemistry
Mr. Deepak Sahu	Refresher course in Environmental Studies (JNU)	15. 07. 2019 to 26.07.2019	Geology
Dr. jyoti Sharma	Refresher course in E- Learning and E-Governance (JNU)	19.08.2019 to 30.08.2019	Geology
Dr. Dnyanada Salvi	National Level FDP on E- Content Development	28- 29 Feb 2020	Geology
Makarand Niphadkar	Refresher course in Financial Mathematics	13/12/2019 to 27/12/2019	Maths
Prabhat Upadhyay	Refresher course in Financial Mathematics	13/12/2019 to 27/12/2019	Maths
Pradeep Singh Jethodi	NPTEL-AICTE Faculty development Programme	Aug-Oct 2019	Maths

Dr. Unnati Padalia	Orientation programme	02/12/2019- 21/12/2019	Microbiology
Dr. Lolly Jain	Short Term Course in E-content Development	19/11/2019- 25/11/2019	Microbiology
Dr. Lolly Jain	MOOC on Learning and Instruction on SWAYAM portal	11/03/2019- 26/04/2019	Microbiology
Dr. Lolly Jain	MOOC on ICT in Teaching and Learning	07/01/2019- 01/02/2019	Microbiology
Mr. Shabib Khan	Faculty Development Program on- Holistic Teacher Training in Innovative Skills of Co-operative Learning and Development of E-content for Teaching Pedagogies in Higher Education, at PES, Modern College of Arts, Commerce and Science, Ganeshkhind, Pune	25/11/ 2019- 01/12/ 2019	Microbiology
Mr. Shabib Khan	Emotional Intelligence for Well Being-3 week MOOC offered by UNESCO under OE4BW programme	20/05/2019- 10/06/2019	Microbiology
Mr. Shabib Khan	OERs for Science Education-3 week MOOC offered by UNESCO under OE4BW programme	20/05/2019- 09/06/2019	Microbiology
Mr. Shabib Khan	MOOC with mookIT -4 week online course offered jointly by the Centre for Continuing Education IIT Kanpur and the Commonwealth of Learning Canada	15/01/2020- 27/02/2020	Microbiology
Mr. Shabib Khan	Evolving as Facilitative Teacher for Sustainable Development- 3 week MOOC offered by UNESCO under OE4BW programme	20/05/2019- 10/06/2019	Microbiology
Mr. Shabib Khan	Bio membranes and Bioenergetics (12 weeks course)under UGC-CEC.NPTEL MOOC on Biomembranes and	15/07/2019- 05/10/2019	Microbiology

	Bioenergetics and on SWAYAM portal of MHRD		
Mr. Shabib Khan	Gut check: Exploring your Microbiome, MOOC offered by Coursera	07/02/2020-16/03/2020	Microbiology
Mr. Shabib Khan	NPTEL MOOC and FDP on Introduction to Proteomics(8 weeks) organized by IIT Bombay. on SWAYAM portal of MHRD	26/08/2019-18/10/2019	Microbiology
Dr. Seema Sambrani	Six day training programme on Patent filing in India at Rajiv Gandhi National Institute of IPR Management, Nagpur.	25/11/2019-30/11/2019	Microbiology
Mr. Shabib Khan	Psychological First Aid (MOOC on Coursera by John Hopkins University)	04/04/2020-12/04/2020	Microbiology
Dr. Lolly Jain	FDP on Managing online Courses and Co-creating MOOC's conducted by Teaching Learning Centre, Ramanujan College, University of Delhi under PMMMNMST	20/04/2020-06/05/2020	Microbiology
Dr. Soniya Shetty	FDP on Managing online Courses and Co-creating MOOC's conducted by Teaching Learning Centre, Ramanujan College, University of Delhi under PMMMNMST	20/04/2020-06/05/2020	Microbiology
Dr. Soniya Shetty	Assessment in Higher Education- Professional development for teachers : MOOC by Erasmus University Rotterdam.on Coursera	30/3/2020-30/4/2020	Microbiology
Dr. Soniya Shetty	Covid 19-'Operational Planning Guidelines to Support Country Preparedness and Response: MOOC by WHO	1/4/2020	Microbiology

Dr. Soniya Shetty	Coronavirus disease -2019 : MOOC by AACCC Learning laboratory and NEJM Knowledgege	23/3/2020	Microbiology
PurvaMedhi	Training and Certification of Manufacturing (level 2)-Food Safety Supervisor	29-07-2019	Nutraceuticals
	Training and Certification of Catering (level 2)-Food Safety Supervisor	30-07-2020	Nutraceuticals
	National Level Faculty depevelopment Programme on E-Contant Development	28/02/2020 - 29/02/2020	Nutraceuticals
Dr. Pallavi Raote Dr. Rucha Naik	Pedagogic Innovations: Challenges and transfromations in inclusive Higher Education (Shor Term Course - SNDT)	06/05/2019 - 11/05/2019	Physics
Ketan Kumar Gayakawad	Faculty induction program (IISER)	30/10/2019 to 23/11/2019	Physics
Ketan Kumar Gayakwad	Holistic teacher training in Innovative Skills of Cooperative Learning and development of e-content in teaching pedagogies in Higher Education'	25/11/2019 to 01/12/2019	Physics
Dr. Rucha Naik	NIUS workshop for teachers on Thermal Physics and Statistical mechanics.	10/12/2019 to 13/12/2019	Physics
Dr. SmitaSurvase Dr. Pallavi Raote	Innovative Experiments using Open source Resources for UG physics Students (FDP)	06/02/2020 - 07/02/2020	Physics
Ms Ranjana Shulk Dr. Pallavi Raote	National Level Faculty Development Programme on E-Content Development	28/02/2020 - 29/02/2020	Physics
Ms. Arati kore	Refresher Course in Statistics	25/02/2020 to 09/03/2020	Statistics
Ms. Shreya Patil	Orientation Program (JNU)	18.11.19- 7.12.19	Zoology
Dr.Shanti Upadhye	Faculty induction program (IISER, Pune)	30.10.19- 23.11.19	

Dr. Shital Mehta	Induction Programme (Rambhu Malgi Prabodini)	13/07/2019-14/07/2019	Accounts
Dr Archana Padgaonkar	Refresher course in Research Methodology for faculty of social science	20/07/2020-01/08/2020	B.Law
Dr. Smita Paranjape	refresher course in commerce	10/02/2019-22/02/2019	Commerce
Ms. Shilpa Sawant	Induction Programme (Rambhu Malgi Prabodini)	13/07/2019-14/07/2019	Commerce
Medhavini khare	Induction programme (Rambhau Mhalgi Prabodhini)	13-07-2019to 14-07-2019	Economics

7. Evidence of success: The faculty development **programs helped** the teachers in acquiring, renewing or broadening their knowledge and practices to benefit themselves, their students, the educational institutions and education in general. This process empowers professors by creating a sense of belonging, challenge, organization and self-confidence. It was evident by the various changes in pedagogy. The knowledge gained can be clearly seen in the methods adopted for teaching. 100% of the teachers are using one or the other mode of ICT. Moreover, we are continuously trying to upgrade and one of the best practices is the regular revision in the syllabus according to the changing demands of industry.

8. Problems encountered and resources required:

Our institute provides full support for the professional development programs and the only reason for not being able to participate in the program (few professors) was a lack of time due to the commitments to prepare classes, grade and attend to students.



Dr. Lolly Jain
IQAC Co-ordinator




Dr. Pradnya Prabhu
Principal

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