



SYMBIOSIS SCHOOL OF BIOMEDICAL SCIENCES

Symbiosis International University

(Established under section 3 of the UGC Act, 1956 vide notification No. F.9-12/2001-U3 Govt. of India)

Accredited by NAAC with 'A' grade

Founder: Prof. Dr. S. B. Mujumdar, M. Sc., Ph. D. (Awarded Padma Bhushan and Padma Shri by President of India)

7.2.1_SSBS_Best Practices (1)_2016-2017

Index

S.No	Title of the Practice
1	Industry Academia Collaboration



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7.2.1 Best Practices 1 (2016 – 2017)

1. Title of the Practice: Industry Academia Collaboration

2. Objectives of the Practice:

- Intense interactions with biotechnology industries at various platforms mutually beneficial and to create springboards for students and faculty
- Visit of Industrial and Academic Experts to SSBS and Interaction with students and also students visit to Industries
- Students dissertation work in Industries and joint publications between Industries and SSBS
- To create awareness among students about the current developments, job opportunities and start-ups and to establish new contacts with food and bio-tech industries

3. The Context:

The post graduate students in Biotechnology and Nutrition and Dietetics are offered courses such as Bioprocess Engineering and Food Science. In these students are exposed to theoretical and experimental aspects. As a part of practical sessions students visit to Industries and Industrialists visit to SSBS provides students with unique experience of understanding industrial sector that can be replicated in practice.

4. The Practice:

Visit to Industries such as Tata Chemical Innovation Centre, Venkateshwara hatcheries, Microbial culture centre etc exposed the students to techniques and technologies used in processing and manufacturing various products such as nutraceuticals, pharmaceuticals, biopharmaceuticals, vaccines etc.

5. Evidence of Success:

Students showed improved interests in equipping their skills in laboratory techniques. These visits have fueled the student's interests to take up internships and dissertation work in various industries and institutes. Students have joined in organizations like NCL, BARC, Venky's etc.

6. Problems Encountered and Resources Required:

Traffic related issues during Industrial visits.



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10/8/16

Report on visit to TATA Chemicals Innovation Centre, Pune

Programme: Industrial visits

Date: 10/8/16

Academic year: 2016-17

Venue: Tata chemicals Innovation Centre, Paud Road, Pune,
Maharashtra – 412111

Number of Participants: 17 M.Sc (Biotechnology, 15-17 batch) students and
two faculty members

Concerned Subjects: Bioprocess Engineering and Emerging Technologies

Coordinator: Dr. Selvan Ravindran and Dr. Pooja Singh

Students witnessed the production of fructose oligosaccharide by fermentation technique. Fructose oligosaccharide is a sugar free sweetener and a naturally occurring dietary fibre with sweet taste. This can be used to manufacture chocolates, sugar free cookies, candy etc. The lab has also formulated a couple of healthy, sugar free spice-beverage mixes. These have been created using bioactives developed by the nutraceutical team. So far they've produced a haldi (turmeric) milk mix and a ginger fenugreek spice mix. Students also learned the importance of chromatography, mass spectrometry and other high end instruments used for the characterization of products. New technology is designed for agricultural applications. Nanotechnology-based micronutrient formulations and slow release pesticides are developed to reduce pesticide application quantity while improving yield. Seventeen students from M.Sc (Biotechnology, 15-17batch) visited the facility.

Report prepared by: Dr. Selvan Ravindran



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Visit to Tata chemicals innovation centre, Pune on 10/8/16



Symbiosis School of Biomedical Sciences [SSBS] M.Sc. Biotechnology; 2015-17 Batch

Date: 10/8/16

No.	Name of Student	PRN	Attendance
1	Ameeta Garje	15040342001	Present
2	Anamika Singh	15040342002	Present
3	Bhattacharya Poushali Asish	15040342003	Present
4	Chhagan Lal Prajapati	15040342004	Absent
5	Chinmay Suhas Pethe	15040342005	Present
6	Dabhade Mayuri Ashok	15040342006	Present
7	Desai Khubi Jayesh Deepa	15040342007	Present
8	Geetika Chauhan	15040342008	Present
9	Gopika Gopal Rinwa	15040342009	Present
10	Juilee Deepak Sawalakhe	15040342010	Present
11	Manali Jain	15040342012	Present
12	Richa Keshri	15040342014	Absent
13	Rusha Chakroborty	15040342015	Absent
14	Samrudhi Telang	15040342016	Present
15	Sonali Joshi	15040342017	Absent
16	Cynthia Raut	15040342018	Absent
17	Gaurav Sonar	15040342019	Present
18	Pooja Singh	15040342020	Present
19	Kabir Umar	15040342021	Present
20	Dhanwani Chaitali	15040342023	Present
21	Shubham Sharma	15040342024	Present
22	Durell D'Souza	15040342025	Present



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11/8/16

Report on visit to Venkateshwara hatcheries pvt ltd, Pune

Programme: Industrial visits

Date: 11/8/16

Academic year: 2016-17

Venue: Venkateshwara hatcheries private limited, Hinjewadi, Pune,
Maharashtra – 411057

Number of Participants: 16 M.Sc (Biotechnology, 15-17 batch) students and
two faculty members

Concerned Subjects: Virology and Vaccinology

Coordinator: Dr. Santosh Koratkar

Venkateshwara hatcheries are involved in the production of inactivated vaccines, combination vaccines and use of SPF eggs in vaccine production. They are focussed on developing poultry vaccines. Two types of poultry vaccines live vaccines and inactivated vaccines are developed.

Egg powders such as pasteurized spray dries hen whole egg powder, dried hen yolk powder, heat stable hen egg yolk powder and hen egg albumin powder were also developed by venkateshwara hatcheries. SSBS faculty Dr. Santosh koratkar coordinated the visit. Sixteen students from M.Sc (Biotechnology, 15-17 batch) visited the facility.

Report prepared by: Dr. Selvan Ravindran



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Visit to Venkateshwara hatcheries private limited, Pune on 11/8/16



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8	Geetika Chauhan	15040342008	Present
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13	Rusha Chakroborty	15040342015	Present
14	Samrudhi Telang	15040342016	Present
15	Sonali Joshi	15040342017	Present
16	Cynthia Raut	15040342018	Absent
17	Gaurav Sonar	15040342019	Present
18	Pooja Singh	15040342020	Present
19	Kabir Umar	15040342021	Absent
20	Dhanwani Chaitali	15040342023	Present
21	Shubham Sharma	15040342024	Present
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12/8/16

Report on visit to Microbial Culture Centre, Pune

Programme: Industrial visits

Date: 12/8/16

Academic year: 2016-17

Venue: Microbial Culture Centre, pashan sus road, Pune,
Maharashtra – 411021

Number of Participants: 17 M.Sc (Biotechnology, 15-17 batch) students and
two faculty members

Concerned Subjects: Bioprocess Engineering and Emerging Technologies

Coordinator: Dr. Selvan Ravindran and Dr. Pooja Singh

Microbial culture center focuses on basic research in the areas of microbial diversity, microbial taxonomy, microbial genomics and proteomics etc. Identification, isolation and preservation of microorganisms from various environmental niches is one of the major focus. New strategies for isolation of “uncultivable microbes” is also another important work carried out in the facility. MCC serves as a national facility for culture collection, deposit and distribution of microbial cultures.

Microbial culture center also provide assistance for preservation, propagation, biodeterioration, microbial biodiversity issues and biosystematics.

Report prepared by: Dr. Selvan Ravindran



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Visit to Microbial Culture Centre, Pune on 12/8/16



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Date: 12/8/16

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M.Sc students project work in Industries / CSIR labs

Name of Student	Institute	Guide
Bhattacharya Poushali	BARC	Dr. Amit Kumar Das
Chhagan Lal Prajapati	Venky's VRDC	Dr. Vinayak Brahmakshatriya
Chinmay Suhas Pethe	NCL, Pune	Dr. Mahesh Kulkarni
Desai Khubi	NCL, Pune	Dr. Narendra Kadoo
Gopika Gopal Rinwa	Serum Institute, Pune	Dr. S. Pisal
Manali Jain	Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow	Dr Soniya Nityanada
Samrudhi Telang	Venky's VRDC	Dr. Vinayak Brahmakshatriya
Sonali Joshi	NCL	Dr. Vidya Gupta
Shubham Sharma	BARC	Dr. Hema Rajaram
Durell D'Souza	NCL	Dr. Kamlesh Jangid



Kamlesh Jangid



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Ph.D. student's dissertation work at Industries, CSIR labs and ICMR labs

Students are also registered for Ph.D. in SSBS and work in Industries or at Council of Scientific and Industrial Research labs towards task-oriented projects to address practical problems.

All the Ph.D. students are mentored by SSBS Faculty members

S.No	Name of the Student	Year	Name of the Guide	Institute
1	Srividya Ravi	2014	Dr. Anuradha Vaidya	National Chemical Laboratory, Pune
2	Priyanka Patel	2014	Dr. Vinay Rale	National Institute for Research in Tribal Health, Indian Council of Medical Research, Jabalpur, M.P.-India
3	Vishal Nanasaheb Pavitrakar	2016	Dr. Selvan Ravindran	Lupin Research Park, Pune
4	Amalesh Jayant Tambe	2016	Dr. Selvan Ravindran	Serum Institute of India Pvt Ltd (SIPL), Pune
5	Digamber Singh Chahar	2016	Dr. Selvan Ravindran	Serum Institute of India Pvt Ltd (SIPL), Pune
6	Santosh Balu Dumbare	2016	Dr. Selvan Ravindran	Lupin Research Park, Pune
7	Akshay Deshpande	2016	Dr. Sunil Saroj	Serum Institute of India Pvt Ltd (SIPL), Pune
8	Kunal Jani	2016	Dr. Vinaykumar Rale	Microbial Culture Collection (MCC), NCCS, India
9	Neihenuo Chuzho	2016	Dr. Neetu Mishra	National Institute of Pathology (NIP), New Delhi

Report Prepared by : Dr. Selvan Ravindran



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