

Quality Improvement Programme (QIP) in Pharmacy (AICTE): An Overview of Achievements

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Abstract

Updating knowledge is utmost important in achieving professional goals. The same is applicable to young pharmacy teachers of India. There are career advancement programmes planned by various government agencies under higher education. The AICTE has started the QIP programme for Pharmacy teachers in the year 1999. Under this program 10 pharmacy institutions were selected to conduct various QIP programmes viz. M.Pharm, Ph.D and short term training for the teachers of AICTE approved Pharmacy Institutions. These QIP centres so far produced 221 M.Pharm and 101 Ph.D teachers under QIP program and also conducted 106 weeks of short term training programmes for teachers. It has been proved that the teachers of pharmacy have already been benefited and developed themselves through QIP programme.

Keywords: Quality improvement programme, short term programmes, M.Pharm, Ph.D, achievements

INTRODUCTION

Updating of knowledge is of paramount importance for teachers to keep in pace with the fast developments taking place especially in the field of science and technology. With the view, way back in 1970, Govt. of India launched the Quality Improvement Programme with the objectives to upgrade the expertise and capabilities of the faculty members of the degree level institutions in the country.

All India Council for Technical Education (AICTE) was established as an advisory body in 1945. Later on 23rd December 1987 it became a statutory body under Act of Parliament with the mandate of planning and development of a well coordinated system of technical education in the country, improvement in quality of technical education and regulation and maintenance of norms and standards. To achieve this, various faculty development programmes have been initiated by AICTE like Quality improvement Programme (QIP), Early Faculty Induction Programme (EFIP) etc.

ABOUT QIP (PHARMACY)

With the sudden upsurge of various technical colleges there was an increase in the appointment of graduate teachers. This led to the proposition of initiating quality

improvement programme (QIP) in various technical courses such as engineering, architecture, pharmacy etc. Presently there are 954 colleges which are conducting B. Pharm courses as per AICTE norms.

Quality Improvement Programme (Pharmacy) was started by AICTE in the year 1999 with a view to uplift the qualifications and skills of teachers of pharmacy colleges across the country. Initially Prof. A. Kalanidhi, Advisor, Human Resource Development Bureau Chief of AICTE contacted Prof. S.S. Agrawal, Director, Delhi Institute of Pharmaceutical Sciences and Research (New Delhi), Prof. Madhusudan Rao, Kakatiya University, Warangal (Andhra Pradesh); Prof. B. Suresh, Principal, J.S.S College of Pharmacy, Ooty (Tamilnadu) and Prof. F.V. Manvi, Principal, KLES College of Pharmacy, Belgam (Karnataka) and Prof. Tarun Jha, Jadhavpur University, Kolkata to start postgraduate and doctorate programmes in Pharmacy (M.Pharm and Ph.D) under QIP and 5 QIP Centres mentioned above were started. Subsequently, centres like, Manipal College of Pharmaceutical Sciences, Manipal (Karnataka); Poona College of Pharmacy, Bharati Vidyapeeth University, Pune; M.S. University of Baroda, Baroda; Dr. Harisingh Gour Vishwavidyalaya, Sagar; Birla Institute of Technology, Mesra, Ranchi have also been approved as QIP centres increasing the number of centres to ten. This has given great opportunities to uplift the qualifications

of undergraduate and postgraduate level teachers in pharmacy colleges.

OBJECTIVES

Quality Improvement Programme was started with following three major objectives:

1. Imparting training to teachers of degree and diploma in pharmacy institutions regarding the new trends and developments in the field of pharmaceutical sciences
2. Upgradation of qualification of teachers from B. Pharm to M. Pharm / Ph.D
3. Professional upgradation of teaching faculties of AICTE approved pharmacy institutions/ Research Promotion Scheme (RPS) grants to Pharmacy teachers

M. PHARM & PH. D PROGRAMME (QIP)

There is an opportunity for the teachers of various degree and diploma level institutions having undergraduate degree to upgrade their qualifications to M.Pharm and Ph.D through QIP programme. Every year teachers of various institutions are selected on the basis of their experience and merit to pursue M.Pharm and Ph.D at ten QIP centres.

The data collected from the ten QIP centres of the country revealed that enormous number of teachers in degree and diploma level pharmacy institutions of this country had already been benefited by this QIP programme and a large number of teachers are pursuing post graduate and doctoral degree in Pharmacy at various QIP centres (Table1). Among 312 teachers selected, 221 have completed M.Pharm and 92 are pursuing postgraduate programme. Similarly out of 138 teachers selected for Ph.D, 101 have been awarded the degree and 37 are pursuing Ph.D at various QIP centres.

Similarly, the various short term Quality Improvement Programme sponsored by AICTE being conducted at various QIP centres (Table 2-7) attract large number of young teachers who are in the beginning of their teaching career and many of them have got their career advancements in terms of promotions. Most of the institutions consider specific number of QIP programmes attended by teachers for their promotions. The Ministry of Human Resource Development (MHRD) through AICTE sanctions the funds for such programmes.

Apart from these, all the QIP centres are regularly receiving grants from AICTE under research promotion schemes (RPS), Modernization and Removal of

Obsolescence (MODROBS). Many of the QIP centres have upgraded the research and other laboratory facilities through such schemes.

Among various QIP centres, DIPSAR, New Delhi, has conducted 12 one week short term QIP programmes and 2 two weeks programmes (Table.2). KLE's College of pharmacy, Belgaum has conducted, 1 one week, 21 two weeks and 7 three weeks training programmes (Table.3). College of Pharmacy, Manipal University, Manipal has organised 11 two weeks short term QIP programmes so far (Table.4). JSS College of Pharmacy, Ooty, has conducted 18 one week courses, 12 two weeks courses till date (Table.5). Jadavpur University, Kolkata, has so far organised 14 two weeks courses (Table.6) and Bharati Vidyapeeth's Poona College of Pharmacy, Pune has conducted 8 two weeks programmes (Table.7).

Overall, the various QIP centres have organised 31 one week, 68 two weeks and 7 three weeks short term QIP programmes, making it a total of 106 weeks, for training the young teachers of various AICTE approved pharmacy colleges in India, and thousands of young pharmacy teachers were benefited by these programmes.

ELIGIBILITY AND OTHER REQUIREMENTS FOR ADMISSION TO M. PHARM AND PH.D COURSES UNDER QIP

Full-time, regular / permanent faculty members of AICTE approved Pharmacy colleges are only eligible to apply for admission in M.Pharm and Ph.D courses sponsored by AICTE under QIP.

M.Pharm Programme:

1. The candidate willing to take admission in this post graduate course should possess a first class degree (or 60% in aggregate wherever class is not awarded) in Pharmacy from a recognized Institution / University.
2. The candidate should have a minimum of two years teaching experience as a full-time regular / permanent faculty of AICTE approved Degree / Diploma level Pharmacy Institutions.

Ph.D Programme:

Candidates seeking admission in the AICTE sponsored Ph. D programme should fulfil the following criteria:

1. First Class Degree (60% in aggregate wherever class is not awarded) at Master's Level in the appropriate branch of specialization in Pharmacy from a recognized Institution / University.

2. A minimum of three-years teaching experience as full-time regular / permanent faculty of AICTE approved Degree / Diploma level Pharmacy Institutions.

Other Requirements:

1. The candidate should also satisfy the minimum eligibility criteria prescribed by the individual Department (and/or the Institution) to which admission is sought.
2. Guest Lecturers, Visiting Lecturers, Teaching Assistants, Ad-hoc/Contract or Part-time Teachers, Technical Assistants, and other such categories of staff are not eligible.
3. Faculty members of the QIP cells are not eligible to apply in the same institution.
4. The faculty members belonging to the institutions run by the same management of QIP centre are not eligible to apply to that QIP centre.
5. A maximum of two candidates, one each in M.Pharm and Ph.D are selected from each institution per year.
6. The candidate, if selected and admitted, should be on deputation and his/her normal salary and allowances are to be paid by the parent institution.
7. The candidate selected for admission under QIP will have to execute an undertaking to serve his/her parent institution for a minimum period of three years after completion of the programme.

QIP SHORT TERM PROGRAMME

For the uplifting of knowledge and skills of teachers, every centre is required to conduct two courses of one or two week's duration for minimum 30 teachers in a year.

CONCLUSIONS

There is always a need for upgrading the knowledge and qualification for the teachers since they are the people who guide the young generation, the torch bearers of our country. Through QIP there is always a scope for improving the knowledge and hence the teachers of pharmacy should make the maximum benefit of the opportunity to develop themselves into more qualified and trained persons through QIP. The quality of classroom teaching is being improved by QIP organized short-term courses for teachers and involvement in developing curricula, teaching manuals and teaching aids at various centres.

Therefore to conclude, the programme has produced 221 M. Pharm and 101 Ph.D whereas 92 are pursuing

postgraduate programme and 37 are pursuing Ph.D course at various QIP centres.

SUGGESTED READING

1. Estimates committee (2003-2004) thirteenth lok sabha nineteenth report of MHRD, AICTE, presented in lok sabha on 4.2. 2004 (164.100.24.208 /ls/committeeR /Estimates/19.pdf)
2. QIP information brochure, 2009-10, National QIP Coordination Centre, DIPSAR. New Delhi, pp.
3. www.aicte.ernet.in/download/Qip_bro.doc accessed on 1-7-2009
4. www.aicte.ernet.in/ResearchSchemes.htm accessed on 1-7-2009
5. www.dipsar.in/programmes/qip.php accessed on 1-7-2009

Table.1: Achievements of QIP centres

| S.N. | Name of the coordinator and e-mail ID | Centres name & address | M.Pharm | | Ph.D | |
|------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|----------|-----------|----------|
| | | | Completed | Pursuing | Completed | Pursuing |
| | Prof. S.S Agrawal Chief Coordinator qipdipsar@yahoo.com, agrawal_shyam@indiatimes.com | Delhi Institute of Pharmaceutical Science & Research Pushp Vihar, Sec-III, M.B Road, New Delhi -110017 | 34 | 17 | 44 | 2 |
| | Prof.K.Chinmaswamy jspooty_qip@rediffmail.com | J.S.S College of Pharmacy Rockland, P.B No. 20, Ootacamund-643001, Tamilnadu | 49 | 8 | 17 | 7 |
| | Prof.K.R Mahadik krmahadik@rediffmail.com | Poona College of Pharmacy, Bharati Vidyapeeth University Erandwane, Pune-411038, Maharashtra | 21 | 14 | 2 | 6 |
| | Prof. M. Sarangapani mandasarangapani@yahoo.co.in | University College of Pharmaceutical Sciences, Kakatiya University, Warangal -506009 Andhra Pradesh | 41 | 4 | 43 | 1 |
| | Prof. D. Sasmal dsasmal@bitmesra.ac.in | Dept. of Pharmaceutical Sciences, Birla Institute of Technology, Mesra, Ranchi-835215, Jharkhand | 15 | 6 | - | 2 |
| | Prof. (Mrs.) S. J. Rajput ghpatepharmacy@yahoo.com srajput@rediffmail.com | Centre for Post-Graduate Studies & Research in Pharmaceutical Sciences, M.S. University of Baroda, Shri G.H.Patel Pharmacy Building, Donor's Plaza, Nr. FDI, Fatehgunj, Vadodara-3900002 | 15 | 3 | - | 5 |
| | Dr. F. V. Manvi principal@klepharm.edu | K.L.E's College of Pharmacy, J.N.M.C Campus, Nehru Nagar, Belgaum-590010, Karnataka | 39 | 15 | - | 2 |
| | Prof. Biswajit Mukherjee biswajit55@yahoo.com | Department of Pharmaceutical Technology, Jadavpur University, Kolkata-700032, West Bengal | 39 | 10 | 22 | 5 |
| | Prof. N. Udupa n.udupa@manipal.edu | Manipal College of Pharmaceutical Sciences, MAHE, Madhav Nagar, Manipal – 576104, Dist.-Udupi, Karnataka | - | 5 | 3 | 5 |
| | Prof. M. D. Kharya mail2dops@gmail.com | Dept. of Pharmaceutical Sciences, Dr. Harisingh Gour Vishwavidyalaya, Sagar-470003 Madhya Pradesh | 9 | 10 | 3 | 2 |

Table. 2: Short term QIP programmes conducted at Delhi Institute of Pharmaceutical Sciences & Research (DIPSAR)

| S No | Subject | Duration | Date |
|------|--------------------------------------------|----------|--------------------------------------------------|
| 1. | Screening & Developments of Drugs | 2 weeks | 21 st Oct to 2 nd Nov 1999 |
| 2. | Screening & Developments of New Drugs | 2 weeks | 15 th - 29 th Mar 2000 |
| 3. | Recent Advances in Drug Delivery System | 1 week | 16 th - 20 th Oct 2000 |
| 4. | Trends in Novel in Drugs Delivery System | 1 week | 26 th - 31 st march 2001 |
| 5. | Analytical Techniques | 1 week | 29 th Oct - 2 nd Nov 2001 |
| 6. | Recent Advances in Analytical Techniques | 1 week | 4 th -8 th March 2002 |
| 7. | Advances in Pharmacology | 1 week | 11 th -15 th Nov 2002 |
| 8. | Advances in Herbal Drugs Technology | 1 week | 24 th - 28 th March 2003 |
| 9. | Recent Advances in Pharmaceutical Sciences | 1 week | 10 th – 14 th Nov 2003 |
| 10. | Recent Advances in Pharmacology | 1 week | 17 th - 21 st Nov 2003 |
| 11. | Recent Advances in Pharmaceutical Sciences | 1 week | 25 th – 29 th Oct 2004 |
| 12. | Recent Advances in Pharmacology | 1 week | 1 st -5 th Nov 2004 |
| 13. | Recent Advances in Pharmaceutical Sciences | 1 week | 21 st -25 th Nov 2005 |
| 14. | Frontiers in Pharmaceutical Sciences | 1 week | 27 th Feb -3 rd March 2006 |

Table.3: Short term QIP programmes conducted at K. L. E 's College of Pharmacy

| S No | Subject | Duration | Date |
|------|----------------------------------------------------------------------------------|----------|---------------------------------------------------|
| 1. | Training Teachers for Tomorrows Need | 2 weeks | 21 st June–3 rd July 99 |
| 2. | Pharmacy Practice (Community, Clinical and Hospital Pharmacy) | 3 weeks | 20 th Sep–1 st Oct 99 |
| 3. | Tissue Culture and Biotechnology | 2 weeks | 24 th Jan–5 th Feb 2000 |
| 4. | Recent Advances in Medicinal Chemistry | 1 week | 24 th – 29 th Apr 2000 |
| 5. | Pharmacology (Drug evaluation) | 2 weeks | 29 th Jan–9 th Feb 2001 |
| 6. | Innovation in Pharmaceutical Technology | 3 weeks | 19 th Feb–3 rd Mar 2001 |
| 7. | Advanced Training in Instrumentation in Pharma Analysis | 2 weeks | 19 th –24 th Mar 2001 |
| 8. | Herbal Drug Technology | 3 weeks | 9 th –21 st July 2001 |
| 9. | Advances in Pharmaceutical Chemistry & Drugs Research | 2 weeks | 15 th –25 th Jan 2002 |
| 10 | Recent Trends in Pharmaceutical Technology | 3 weeks | 5 th –17 th Mar 2002 |
| 11. | Advances in Pharmacology Path physiology & Toxicology | 2 weeks | 10 th -22 nd June 2002 |
| 12. | Herbs as Potential Sources of Biomedicinals | 2 weeks | 30 th Sep– 2 th Oct 2002 |
| 13. | Health care through Pharmacy Practice | 3 weeks | 6 th – 18 th Jan 2003 |
| 14. | Cosmeceuticals Emerging Concept | 3 weeks | 3 rd – 15 th Mar 2003 |
| 15. | Advances in Microbiology & Pharmaceutical Biotechnology | 2 weeks | 5 th – 17 th Jan 2004 |
| 16. | Prospect and Perspectives of Natural Plants Products in Medicine | 2 weeks | 1 st – 13 th Mar 2004 |
| 17 | Prospective of Drug Delivery System an Approach to Patient Compliance | 2 weeks | 12 th – 24 th July 2004 |
| 18. | Clinical Research Practice and Regulatory Affairs | 2 weeks | 17 th – 28 th Dec 2004 |
| 19. | Quality Assurance Methods & Strategies in New Drugs Discovery | 2 weeks | 14 th – 28 th Feb 2005 |
| 20. | Recent Advances in Pharmacognosy | 2 weeks | 27 th June - 9 th July 2005 |
| 21. | Advances in Molecular Biology & Pharmaceutical Biotechnology | 2 weeks | 19 th – 30 th Dec 2005 |
| 22. | Pharmaceutical Regulatory Affairs & Quality Assurance Challenges & Opportunities | 2 weeks | 20 th - 31 st Mar 2006 |
| 23. | Trends in Pharmacology Clinical Trials & Toxicology | 3 weeks | 1 st – 14 th July 2006 |
| 24. | Approaches for Drugs Discovery & Development Bioinformatics | 2 weeks | 18 th - 31 st Dec 2006 |
| 25. | Pharmacognosy Photochemistry & Drug | 2 weeks | 2 nd – 13 th July 2007 |
| 26. | Drugs Development & Process Research | 2 weeks | 10 th – 21 st Mar 2008 |
| 27. | Innovations in Pharmaceutical Technology & Drug Delivery system | 2 weeks | 21 st July – 1 st Aug 2008 |
| 28. | Pharmacy Practice and Clinical Research | 2 weeks | 17 th – 28 th Nov 2008 |
| 29. | Drugs for Tomorrow : Design and Development | 2 weeks | 16 th - 29 th Mar 2009 |

Table.4: Short term QIP programmes conducted at Manipal College of Pharmaceutical Sciences

| S No | Subject | Duration | Date |
|-------------|-----------------------------------------------------------------------------------------------------------------|-----------------|-------------------------------------------------|
| 1. | Clinical Research & Regulatory Affairs- An Update | 2 weeks | 19 th Sep - 1 st Oct 2005 |
| 2. | Emerging Areas in Drug Discovery & Development | 2 weeks | 7 th – 19 th Nov 2005 |
| 3. | Frontiers in Pharmaceutical Sciences | 2 weeks | 30 th – 11 th Feb 2006 |
| 4. | Challenges & Opportunities in Pharmaceutical Research | 2 weeks | 12 th – 24 th Nov 2007 |
| 5. | Recent Trend in Drug Design Discovery & Therapeutics | 2 weeks | 14 th – 28 th Feb 2008 |
| 6. | Protein Targets in Drugs Discovery and Development | 2 weeks | 2 nd – 14 th June 2008 |
| 7. | Perspectives in Drug Discovery & Development | 2 weeks | 16 th – 28 th June 2008 |
| 8. | Search & Research – Gateway to Pharma Knowledge | 2 weeks | 4 th – 16 th Aug 2008 |
| 9. | Opportunities & Challenges in Clinical Research & Management for Better Patient Care | 2 weeks | 18 th – 30 th Aug 2008 |
| 10. | Recent Advances in the Synthesis of Heterocyclic Compounds & Advances in Instrumental Methods of Analysis | 2 weeks | 20 th Oct – 1 st Nov 2008 |
| 11. | Nanotechnology & Nanomedicine for Improved Drug Delivery & Better Health Care Management | 2 weeks | 3 rd – 15 th Nov 2008 |

Table.5: Short term QIP programmes conducted at J.S.S College of Pharmacy

| S No | Subject | Duration | Date |
|------|-----------------------------------------------------------------------------------------|----------|-----------------------------------------------------|
| 1. | Genetic Engineering Cell Culture Other Aspects of Pharmaceutical Biotechnology | 2 weeks | 15 th to 26 th Feb 2000 |
| 2. | Pharmaceutical Analytical Technique | 2 weeks | 27 th Feb to 10 th March 2000 |
| 3. | Pharmacological Screening Technique | 1 week | 24 th to 30 th July 2000 |
| 4. | Recent Advances in Pharmaceutical Sciences | 1 week | 17 th to 23 rd Nov 2000 |
| 5. | Recent Advances in Pharmaceutical Chemistry | 2 weeks | 28 th May to 10 th June 2001 |
| 6. | Recent Trends in Pharmaceutical Technology | 2 weeks | 10 th to 22 nd Mar 2003 |
| 7. | Recent Trends in Pharmaceutical Analysis & Regulatory Requirements | 2 weeks | 10 th to 22 nd Mar 2003 |
| 8. | Recent Trends in Herbal Research | 2 weeks | 10 th to 22 nd Mar 2003 |
| 9. | Applied aspects of Microbial Molecular and Cell Biology in Pharmaceutical Biotechnology | 2 weeks | 23 rd Feb to 7 th Mar 2004 |
| 10. | Extraction & Standardization of Plants Based Medicines | 2 weeks | 23 rd Feb to 7 th Mar 2004 |
| 11. | Pharmacological Techniques in Drug Development and Safety Profiles | 2 weeks | 23 rd Feb to 7 th Mar 2004 |
| 12. | Recent Trends in Pharmaceutical Formulation Technology | 1 week | 14 th to 19 th Mar 2005 |
| 13. | Drug Information & Clinical Pharmacokinetics | 1 week | 14 th to 19 th Mar 2005 |
| 14. | Recent Advancement in Herbal Drug Research | 1 week | 14 th to 19 th Mar 2005 |
| 15. | Modern Trends in Pharmaceutical Chemistry | 2 weeks | 7 th to 20 th Feb 2006 |
| 16. | Trends in Pharmaceuticals Analysis | 1 week | 14 th to 20 th Feb 2006 |
| 17. | Experiments Techniques in Pharmacology & Toxicology | 1 week | 1 st to 8 th Mar 2006 |
| 18. | Challenges in Standardizing Traditional Herbal Formulations | 1 week | 1 st to 8 th Mar 2006 |
| 19. | Newer Advancements in Herbal Drug Research | 1 week | 7 th To 13 th Mar 2006 |
| 20. | Advance Technique in Drug Development | 1 week | 30 th Mar 6 th Apr 2007 |
| 21. | Approaches in Drug Development | 1 week | 30 th Mar to 6 th Apr 2007 |
| 22. | Newer Development in Pharmaceutical Technique & Pharmacokinetics | 1 week | 30 th Mar to 6 th Apr 2007 |
| 23. | Newer Advancements in Herbal Drug Research | 1 week | 7 th To 13 th Mar 2007 |
| 24. | Advance Technique In Experimental Pharmacology | 1 week | 30 th Mar to 6 th Apr 2007 |
| 25. | Approaches in Drugs Development | 1 week | 30 th Mar to 6 th Apr 2007 |
| 26. | Newer Developments in Pharmaceutical Technique and Pharmacokinetics | 1 week | 30 th Mar to 6 th Apr 2007 |
| 27. | Modern Trends in Pharmaceutical & Molecular Biotechnology | 1 week | 4 th Feb to 9 th Feb 2008 |
| 28. | Recent Technique in Pharmaceuticals Analysis | 1 week | 14 th Mar to 20 th Mar 2008 |
| 29. | Trends in Drug Discovery Development | 2 weeks | 9 th Feb to 22 nd Feb 2008 |
| 30. | Newer Advancements in Herbal Drug Research | 2 weeks | 3 rd Mar to 15 th Mar 2008 |

Table.6: Short term QIP programmes conducted at Jadavpur University, Kolkata

| S No | Subject | Duration | Date |
|------|------------------------------------------------------------------------------------------|----------|---------------------------------------------------|
| 1. | Current Development and Direction for Drug Research and its Future Beyond 2025 | 2 weeks | 4 th - 19 th July 2005 |
| | | 2 weeks | 20 th July - 04 th Aug 2005 |
| 2. | Drug Research – From Laboratories to Market | 2 weeks | 9 th Jan – 21 st Jan 2006 |
| 3. | Drug Design and its Mechanism | 2 weeks | 11 th – 26 th July 2006 |
| | | 2 weeks | 28 th July – 11 th Aug 2006 |
| 4. | Drug Interaction and Toxicity | 2 weeks | 2 nd – 16 th Feb 2007 |
| 5. | Drug to Formulations: Challenges and Solution | 2 weeks | 11 th -24 th July 2007 |
| | | 2 weeks | 25 th July – 7 th Aug 2007 |
| 6. | Drug Delivery and Drug Targeting Research | 2 weeks | 9 th – 22 nd Jan 2008 |
| 7. | Progress in Pharmaceutical Research and Technology | 2 weeks | 18 th – 30 th Aug 2008 |
| | | 2 weeks | 1 st – 13 th Sep 2008 |
| 8. | Future prospect of Biotechnology and Pharmaceutical Sciences for Pharmaceutical Industry | 2 weeks | 9 th – 22 nd Jan 2008 |
| 9. | A New Pharmacy Era: Quality Initiatives and New Technology | 2 weeks | 9 th – 23 rd July 2009 |
| | | 2 weeks | 24 th July – 7 th Aug 2009 |

Table.7: Short term QIP programmes conducted at Poona College of Pharmacy, Bharati Vidyapeeth University, Poona

| S No | Subject | Duration | Date |
|------|----------------------------------------------------------------|----------|---------------------------------------------------|
| 1. | Advances in Pharmacology | 2 weeks | 20 th Feb – 4 th Mar 2006 |
| 2. | Innovations in Pharmaceutical Biotechnology | 2 weeks | 20 th Feb – 4 th Mar 2006 |
| 3. | Herbal Drug Standardization | 2 weeks | 19 th Oct – 1 st Dec 2007 |
| 4. | Nanotechnology in Advanced Drug Delivery | 2 weeks | 4 th – 16 th Feb 2008 |
| 5. | Recent Advances in Chromatography | 2 weeks | 18 th – 28 th Feb 2008 |
| 6. | Herbal Drug Technology | 2 weeks | 23 rd June – 5 th July 2008 |
| 7. | Education and Opportunities in Pharmacy and Clinical Research. | 2 weeks | 12 th – 24 th Jan 2009 |
| 8. | Discovery and Development of New Chemical Entities. | 2 weeks | 16 th – 28 th Feb 2009 |