



BIOPROCESSING UNIT (BPU)



(Dept. of Biotechnology, Ministry of Science & Technology, Govt. of India)
2nd Floor, C-127, Phase VIII, Industrial Area, S.A.S. Nagar, Mohali-160 071. (Pb) Website :
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REQUIRES SCIENTIFIC & TECHNICAL STAFF

ADVERTISEMENT NO: BPU / 06 / 2013 / HR

Last Date to Apply : Applications to reach BPU by September 02, 2013.

Method of Application : Hard Copy and as per Prescribed Format

(Note: Applications from abroad (Indian citizens only may apply by e-mail bpusecretariat@gmail.com)

Application format, details of the vacancies etc. can be downloaded from BPU website (www.bpu.res.in) under heading "Vacancies"

The Department of Biotechnology, Government of India is establishing the BioProcessing Unit (BPU), an autonomous institute in the "Knowledge City", at Sector-81, SAS Nagar, Mohali (Punjab). This futuristic innovation institute of its own kind in the country would advance knowledge, leads and emerging technologies/processes towards applications and products and link them with entrepreneurs in the area of bioprocesses, bio-products, value-addition to bioproducts. To steer this mission and realize its vision, the institute requires scientists, technologists, and technical support personnel as under:

1. Associate Plant Manager

(Technical Innovation, Process/Plant Design and Operations)

PB-4 (Rs. 37400-67000) Grade Pay of Rs. 8700 (higher start within the scale is possible for a deserving case)

One Post (Unreserved).

Age limit : Below 55 Years.

Essential Qualifications:

(a) **Educational:** Ph.D. or First class (or equivalent) M.Tech./M.E. in Chemical Engineering/Chemical Technology/Process Design Technology/Processing Plant Engineering/Bioprocess Technology.

(b) **Professional Experience:** Professional work experience in relevant areas such as above (a) at an institute or university or industry of repute for a period of at least 7 years for M.Tech. plus Ph.D. or 10 years for M.Tech./M.E., with evidence of leadership. The experience should be substantiated by consistent productivity/performance with respect to at least one of the following: (a) high impact SCI publications (b) competitive quality patents (leading to licensing, translation or tangible superiority in the relevant field) in chemical engineering/process engineering for bioproducts/semi-bioproducts, (c) demonstrated consultancy or other such projects executed in public or private sectors related to bioprocessing with specific and significant technological ingenuity of contribution and outcome.

Desirable Qualifications: Possessing leadership in one or more of the following:

(i) Technical experience of designing, installing and running a processing pilot plant particularly bioprocessing plant.

- (ii) Experience of up-scaled production in a pilot plant beginning with bench scale inputs/information/leads.
- (iii) Experience of working in/for a chemical processing/bioprocessing based industry of repute with consistent actual involvement in the technology and/or process for product(s) generation.
- (iv) Patents/publications density around specific process(s) relevant to bioprocessing.
- (v) Significant participation in designing/improving, installation and operation of a sizable translational facility for specific agri-produce/bioresource processing based product(s).
- (vi) Demonstrated ability of bulk production of phytochemicals, chemicals and other products from biological materials.

Job Requirements: This is a leadership position to carry out assimilation of the existing technologies of diverse origin and translate them for up-scaled production considering all techno-economic aspects of the feed stock bio-resources, processing and the end product(s). The position bears the responsibility of technical development, execution and management of the processing plant (covering design, installation and operational domains). The position particularly attracts an experienced person with passion of development of lead knowledge and technology guided demonstration units of different production scales from diverse bio-resources of value added usage. The assignments could be dynamic in tune with the requirements of the institute from time to time.

2. Processing Plant Engineer:

(Chemical Engineering/Processing Technology):

PB-3 (Rs.15600-39100) Grade Pay of Rs. 7600 (higher start within the scale is possible for a deserving case): **One Position (Unreserved)**

Age limit: *50 Years.

Essential Qualifications:

- (a) ***Educational:*** Ph.D. or M.Tech./M.E. in Chemical Engineering/Chemical Technology/Process Design/Process Engineering/Processing Technology/ Process Engineering/ Food Technology/Engineering.
- (b) ***Professional Experience:*** Professional work experience in relevant areas such as above at (a) in an institute or university or industry of repute of at least 5 years for M.Tech./M.E. plus Ph.D. or 8 years for M.Tech./M.E. degree holders, with evidence of lead work. The experience should be substantiated with demonstrated consistent productivity/performance with respect to at least one of the following: (a) high impact SCI publications related to chemical engineering/process engineering for bioproducts generation in bulk and/or (b) relevant bioprocess/bioproduct patents with strengths of licensing, translation or of tangible superiority in the field of competition and scope and/or (c) demonstrated consultancy or other such projects executed in public sector organizations or private sectors related to bioprocessing with significant technological ingenuity/ contribution and outcome.

Desirable Qualifications: Experience in one or more of the following:

- (i) Process or product development patent portfolio relevant or related to agri-processing/bio-processing.
- (ii) Consistent track-record of technical work of process translation/optimization/up-scaling leading to quantifiable output in a reputed organization having R&D or innovational strength.
- (iii) Experience of working on separation/production process(es) or development/translation/up-scaling of a process.
- (iv) Innovation of processes/application of processes of linkage with/relevance to industry/ entrepreneurship/start-up companies.

- (v) Experience of working in an industry of repute with production portfolio of chemical processing/bioprocessing based bulk products and with core involvement in the technology and process of the product(s).

Job Requirements: This is a senior/lead innovational-cum-developmental engineering position with key focus on use of technological processes for production of up-scaled value-added products from the feed stocks of biological origin (agro/food/feed etc.). The position requires development and functionalization of general as well as an array of process/product-specific facilities, their usage for demonstration and delivery of quality products and their commercial perspectives. It also involves innovations on feed stocks to produce quality products from them. The position particularly attracts a creatively thoughtful person with passion to effectively undertake ground work and to deliver tangible results, keeping in view techno-economic and scalability considerations of the processes and products based on secondary agriculture. Understanding and implementation of quality controls and enabling production in a cGMP environment for the bulk products would also be required.

3. **Scientist D**

(Chemical Engineering)

Pay Band-3 (Rs. 15600-39100 with Grade Pay of Rs. 7600)

One Post (Unreserved).

Age limit: 50 Years

Essential Qualifications:

- (a) **Educational:** Ph.D. in Chemical Sciences with specialization in Chemical/pharmaceutical Engineering or M.Tech/M.E. in Chemical Engineering/Chemical Technology/Process Technology
- (b) **Professional Experience:** Relevant experience of at least 5 years for M.Tech./M.E. plus Ph.D. or 8 years for M.Tech./M.E. or 7 years for M.Sc. plus Ph.D. degree holders experience, with evidence of lead role and R&D output. Experience should be of quality-focussed involving chemical process up-scaling, knowledge translation with respect to production/value addition to polymers/biomolecules from natural resources (plants, microbes, animals). The evidence of lead role should be manifested by one or more of the following:
- (i) High quality publications in SCI journals
 - (ii) Quality patents
 - (iii) Process innovation Pilot plant production
 - (iv) Integrated processing for multiple products
 - (v) Biochemical or Chemical processes/technologies developed for transformation, semi-synthesis, recovery/purification/fractionation of compounds
 - (vi) Bioproducts of utility identified/advanced in quality

Job Requirement:

To develop and lead a team of chemical and biochemical processing researchers/technical workers/innovators with key focus on value-additive transformation of biomass, recruitment/validation of such processes for potential applications/products related to agri-food, agro-industry and agri-mass supply and agri-waste scenario etc. Collateral activities expected are process economics, process scalability, process sustainability and product analysis/quality control, stabilization/stability evaluation. An inter-disciplinary orientation of thoughts and actions is also necessary for linkage/utility of the work. Other such bioprocessing relevant tasks may also be expected as per needs of the institute from time to time.

4. Scientist D

(Bioproduct Innovation & Development)

Pay Band-3: (Rs. 15600-39100 with Grade Pay of Rs. 7600)

One Post (Unreserved).

Age limit: 50 Years

Essential Qualifications:

- (c) **Educational:** Ph.D. in any area of Science or Technology or Engineering with specialization (Thesis) in the area related to development of value added plant bioproducts or M.Tech/M.E. in Chemical Engineering/Chemical Technology/Pharmaceutical Science and Technology or Food Science and Technology.
- (d) **Experience:** Relevant experience of at least 5 years for M.Tech./M.E. plus Ph.D. or 8 years for M.Tech./M.E. or 7 years for M.Sc. plus Ph.D. degree holders, with evidence of lead role and R&D output. The experience should cover research and/or innovations around scalable and sustainable bioproduct formulation and development preferably covering the knowledge and value addition to bioresources and/or agri-residues or integrated knowledge translation for improved solutions.
 - (i) High quality publications in SCI journals
 - (ii) Quality patents on Bioproducts and /or their improvement Innovative Product Formulation and Production with relevance to agri-residues/byproducts/secondary agriculture
 - (iii) Integrated knowledge translation for scalable & sustainable products

Job Requirement:

To develop innovative, healthful or otherwise utility products for economic or quality gains from sustainable bioresources and carry out upstream applied R&D around such products, demonstrating them to the entrepreneurs and trainees. The focussed product and its process has to be scalable, pragmatic and bear positive economic/business sense for its volume and quality. An inter-disciplinary orientation of thoughts and actions are also necessary for progressive linkage/utility. Other such bioprocessing relevant tasks may also be expected as per needs of the institute from time to time.

5. Scientist C

(Bioprocessing Technology)

Pay Band-3 (Rs.15600-39100 with Grade Pay Rs. 6600)

One Post (Unreserved)

Age limit: 45 Years

Essential Qualifications:

- (a) **Educational:** Ph.D. in Chemical Technology or Biotechnology with specialization (Thesis) related to Agri-Bioprocessing or Bioresource Processing for Products or M. Tech./M.E. in Chemical Engineering or Food Technology.
- (b) **Research or Industrial Experience:** Three years (for M.Tech./M.E. plus Ph.D.) or Four years (for M.Sc. plus Ph.D.) or Six years (for M.Tech./M.E.) relevant R&D experience in the area of Bioprocessing Technology/Up-Scaled Bioprocess Development, Translational BioProduct Development, New BioFormulations of Food or Nutritional/Nutraceutical or other utilities/significance. The experience should be substantiated by demonstrated output with respect to one or more of the following:
 - (a) SCI publications and/or quality patents related to tangible bioproducts from bioresources.
 - (b) Identified/Developed new products or processes for harvesting useful products of Scale

- (c) Experience of up-scaling of existing process from a translation or application perspective
- (d) Improvement of processes and products centered on agri-residues, biosources and byproducts.

6. **Scientist C**

(Production Chemist)

Pay Band-3: (Rs.15600-39100 with Grade Pay Rs. 6600)

One Post (Unreserved).

Age limit: 45 Years

Essential Qualifications:

- (c) **Educational:** Ph.D. in Chemical Sciences with specialization (Thesis) related to natural products isolation and modification/derivatization.
- (d) **Research or Industrial Experience:** Three years (for M.Tech./M.E. plus Ph.D.) or Four years (for M.Sc. plus Ph.D.) relevant R&D experience in the area of chemistry of carbohydrates/polysaccharides from bioresources with respect to isolation and/or modification of polysaccharides/polymers for value added applications. The experience should be substantiated by demonstrated output with respect to one or more of the following:
 - (a) SCI publications and/or quality patents related to carbohydrates/polymers
 - (b) Identified/Developed new products or processes related to use of carbohydrates/polymers
 - (d) Synthesis of novel (as reaction or as product) derivatives of natural products
 - (e) Chemical processing of carbohydrates or fractionation of carbohydrate rich biomass

7. **Scientist C**

(Analytical-cum-Preparative Biochemistry)

Pay Band-3: (Rs.15600-39100 with Grade Pay Rs. 6600)

One Post (Reserved for OBC).

Age limit: 45 Years

Essential Qualifications:

- (e) **Educational:** M.Sc. (Biochemistry) and Ph.D. (Biochemistry) with specialization (Thesis) related to biochemical assays/proteins/enzymes.
- (f) **Research Experience:** Four years relevant R&D in the area of biochemical processes/analyses, proteins/enzyme assay, isolation/characterization, metabolite isolation and assays etc. The experience should be substantiated by demonstrated output with respect to one or more of the following:
 - (a) SCI publications and/or quality patents related to biochemical/enzyme assays
 - (b) Patents/products related to assays and isolations

8. **Senior Technical Assistant**

(Biochemistry/Food Science & Technology)

Pay Band-2: (Rs.9300-34800 with Grade Pay Rs. 4200)

One Post (Unreserved)

Age limit: 30 Years

Essential Qualifications: First class M.Sc. in Biochemistry or Food Science & Technology with at least one year experience of working on one or more of technical assignments such as bio-sample preparation, biochemical analyses, analytical or processing instrumentation operation and maintenance, microbial culture handling, food fermentation, food technology/analysis activities etc. in an R&D organization or in a R&D wing of an industry of repute.

9. Senior Technical Assistant

(Organic/Analytical Chemistry)

Pay Band-2 (Rs.9300-34800 with Grade Pay Rs. 4200)

One Post (Unreserved)

Age limit: 30 Years

Essential Qualifications: First class M.Sc. in Chemistry (preferably with specialization in organic chemistry or analytical Chemistry with at least one year experience of working on one or more of technical assignments such as chemical analyses through LC-MS, GC-MS, NMR, preparative column chromatography, natural product isolation, synthesis/semi-synthesis, flash chromatography etc. in an R&D organization or in a R&D wing of an industry of repute.

Selection Process:

1. The applications received against the advertised positions would be screened by a Screening-cum-Shortlisting Committee constituted for the purpose.
2. The candidates from amongst the eligible candidates would be short-listed by the Screening-cum-Shortlisting Committee on the basis of qualifications, nature and quality of experience etc.
3. If required a written test or other professional test(s) may be conducted by the institute for assessing the capability/intellect and/or professional competence and/or comparative evaluation for pre-screening before interview.
4. The Screening-cum-Selection Committee would make a decision as to the number of candidates to be recommended for calling for interview with respect to each position.
5. The short listed candidates would be called to appear for an interview before a Selection Committee for the final selection.
6. In the event of none of the interviewed candidates is found suitable for the position(s), the post(s) would not be filled.

General Conditions

1. The date for determining the age, experience, qualifications etc. shall be the last date of receiving applications at BPU.
(*Age limit for candidates to be considered on deputation on foreign service terms is 56 years, as per Govt. of India rules, and upper age limit is relaxable for SC/ST/OBC/Women etc. as per Govt. of India rules)
2. In addition to the usual pay & allowances as admissible vide 6th Pay Commission in the above scales, other benefits such as Leave Travel Concession, Medical expenses, House Rent Allowance, Transport Allowance, Telephone Expenses etc. are also available as per Government of India rules.
3. Candidates on direct selection shall be governed by New Pension Scheme of Central Government made effective from 01-01-2004.
4. The appointee would be on probation for a period of two years which may be extended or curtailed at the discretion of the Competent Authority. Further, continuation will also depend on candidate's performance during the initial period of five years.
5. At the time of joining, the candidate will have to withdraw any other applications that he/she may have submitted elsewhere for employment.
6. Application must be complete in all respects and as per the prescribed format that can be downloaded from website of Bioprocessing Unit website (www.bpu.res.in) under the heading "Vacancies".
7. Applicants from abroad (Indian Citizen only) may also apply by email (bpusecretariat@gmail.com) by the last date of application. However, BPU would not take any responsibility for any failure or e-errors/mishaps/defects related to the email communication and its attachments.

8. The vital point information like designation, organization, previous employment profile, scale and band of pay and grade pay, type of pay scale like central Govt. (CDA) or Industrial (IDA) and equivalent CDA in case of later, nature of duties etc. must be given in full, failing which the application may be summarily rejected without any further follow up, whatsoever.
9. The application(s) must be submitted as per format including signed supplementary format(s) of synopsis and other information. The applications not in the prescribed format and not accompanied by the synopsis sheet may be rejected.
10. In case of applicants from public sector/Govt. organizations/institutions, the application must be forwarded through proper channel. However, to avoid delay in application, an advance copy of the application may be submitted directly. The advance copy will be considered if followed by application sent through proper channel or on production of NOC from the Department at the time of interview.
11. All applications must be accompanied by attested copies of all certificates with respect to age, qualifications, experience, etc.
12. Mere fulfilment of essential qualifications and experience does not entitle a candidate to be called for interview and BPU reserves the right to devise criteria to screen the applications for short-listing of candidates for interview and the decision of the CEO, BPU shall be final and binding on all applicants.
13. In case a selected candidate is already employed in a permanent post, his/her request for deputation and salary protection will be considered as per Government of India rules, regulations and guidelines.
14. Incomplete applications will be rejected.
15. The above positions are open only to Indian Nationals.
16. Outstation candidates called for interview will be paid to and from second class railway fare, as per Government rules, on presentation of the proof of travel.
17. If one is applying for more than one posts, separate application should be submitted for each post.
18. In case of insufficient response to this advertisement in terms of number of eligible applicants against any position, the applications received against said position(s) may not at all be processed further. No intimation etc. would be given to the applicants nor such queries would be entertained.
19. In case, the Selection committee finds nobody suitable among those interviewed, the position would not be filled in this recruitment exercise.
20. One or more or all of the positions advertised herein may not be filled at all or in this instance, depending upon the institute's priorities, and the process of selection may be terminated at anytime and with no specification of likely chance, date or statement of its resumption as a fresh round of exercise.
21. The institute would have the sole discretion whether to make a recruitment on a position or not at any stage.
22. Interim enquiries would not be attended.
23. Bringing in any influence in the recruitment process would lead to disqualification of the candidature(s).

Important

- **The applications must be submitted in the prescribed format (placed below)**
- Completed applications must reach at the address: **Chief Executive Officer (Attn: Administrative Officer), C-127 (2nd Floor), Phase-8, Industrial Area, S.A.S. Nagar, Mohali-160071, Punjab, by September 02, 2013.**
- All the positions are based at Mohali (Punjab) but liable to serve anywhere in India.
- A Synopsis-Sheet as per format given with the Standard Application Form of BPU should be submitted along with the application form.

- Canvassing in any form or bringing influence, political or otherwise, will lead to disqualification of the candidate.
- The decision of BPU in all matters relating to eligibility, acceptance or rejection of application, mode of selection, and conduct of interviews etc. will be final and binding on the candidates.
- In exceptionally meritorious cases or special circumstances, the eligibility requirements of age, education and experience for a position may be relaxed by the competent authority.
- If the last date of application happens to be a holiday, immediate next working day would be construed as the last date of receipt of applications.
- **The applications would be received only during normal working hours and only on working days.**