

CSIR-NATIONAL CHEMICAL LABORATORY
Dr. Homi Bhabha Road, Pune - 411 008

Advertisement No. 01/2017 [ABSTRACT]

Last Date for Receipt of Online applications: 10.04.2017

A unique opportunity for research careers in Science & Technology

The Council of Scientific and Industrial Research (CSIR) is an autonomous organization under the Ministry of Science & Technology, Government of India. It is amongst the foremost scientific and industrial research set-ups in the world, having state-of-the-art infrastructure and scientific and technical manpower second to none, CSIR covers practically the entire spectrum of scientific and industrial R&D of national and international importance. This ranges from aerospace to ocean exploration, micro-electronics to structural and environmental engineering, smart materials to mechatronics, petrochemicals to synthetic biology and from robotics and micro-machines to drugs & pharmaceuticals and agrochemicals.

National Chemical Laboratory, a unit of Council of Scientific and Industrial Research (CSIR), is a premier scientific organization involved in conducting high quality research in area of chemical and allied sciences. Applications are invited **ONLINE ONLY** from Indian nationals for filling up the following Scientific Positions:

Designation	No. of Posts	Pay Band (PB)	Grade Pay (per month)	*Total Emoluments (per month)	**Upper Age Limit not exceeding (as on last date)
Scientist	04(UR) 01(UR-PWD) 05(OBC) 03(SC) 02(ST)	Rs.15600-39100 (PB-3)	Rs.6600/-	Rs. 75,541/-	32 years
Senior Scientist	10 (UR)		Rs.7600/-	Rs. 86,644/-	37 years

*Total Emoluments means approximate total emoluments on minimum of scale including HRA in Class 'X' City.

** Please see age relaxation under Relaxation column.

For further details please visit our website <http://recruit.ncl.res.in> and apply through the online application form available there. The detailed advertisement, terms and conditions and instructions to the candidates are available on the website. For any technical query while applying online, please send e-mail to recruitment@ncl.res.in.

Date of commencement of online applications : 10.03.2017

Last date for receipt of online applications : 10.04.2017

Last date for receipt of hard copy applications : 03.05.2017

Sd/-
(Administrative Officer)



CSIR - NATIONAL CHEMICAL LABORATORY
(Council of Scientific & Industrial Research)
Dr. Homi Bhabha Road
Pune - 411008 (INDIA)

Advertisement No. 01/2017 Dated 10.03.2017

Last date for receipt of online applications: 10.04.2017

A unique opportunity for research careers in Science & Technology

CSIR-National Chemical Laboratory (NCL), Pune a premier institute under the Council of Scientific and Industrial Research (CSIR), involved in multidisciplinary R&D programmes of both basic and applied nature across scientific disciplines for economic, environmental and societal benefits for the people of India. It is engaged in the scientific research in chemicals and allied sciences.

In order to meet the incoming demands of research in both basic and allied sciences, applications are invited **ONLINE ONLY** from enthusiastic, young Indian researchers having excellent academic record and proven scientific achievements along with requisite experience and a high degree of motivation and desire to take up research as a career in the field of Biochemical Sciences, Physical & Materials Chemistry, Chemical Engineering & Process Development, Catalysis & Inorganic, Organic Chemistry, Polymer Science & Engineering to fill up the vacancy of following posts of scientists as per the details given below.

Designation	No. of Posts	Pay Band	Grade Pay (per month)	*Total Emoluments (per month)	**Upper Age Limit not exceeding (as on last date of online application)
Scientist	04(UR) 01(UR-PWD) 05(OBC) 03(SC) 02(ST)	Rs.15600-39100 (PB-3)	Rs.6600/-	Rs. 75,541/-	32 years
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* Total Emoluments means approximate total emoluments on minimum of scale including House Rent Allowance in Class 'X' City.

**Please see age relaxation under Relaxation column.

**DETAILS OF SCIENTIFIC POSITIONS (RS. 15600- 39100 (PB-3)
WITH GRADE PAY RS. 6600/-P.M.)**

POST CODE NO. 01

SCIENTIST - ONE POST (UNRESERVED)

DIVISION - CATALYSIS & INORGANIC CHEMISTRY

Essential Educational Qualifications & Experience: Ph.D. submitted in Chemistry or Chemical Science.

Desirable Qualification and Experience: Candidate with a Ph.D. degree awarded and having research experience in the area of material (catalyst) characterization / C1 chemistry is preferred. The candidates having experience in Product Development/Technology Innovation/Applied Technology etc. will be preferred.

Job Specification: The incumbent will be involved in projects related to catalyst characterization and lower alkanes chemistry. He/she will also conduct independent research in the area of catalysis and inorganic materials.

POST CODE NO. 02

SCIENTIST - ONE POST (RESERVED FOR SC)

DIVISION - CATALYSIS & INORGANIC CHEMISTRY

Essential Educational Qualifications & Experience: Ph.D. submitted in Chemistry or Chemical Science or Chemical Engineering.

Desirable Qualification and Experience: Candidate with Ph.D. awarded and having research experience in the area of heterogeneous catalysts synthesis (zeolites/oxides/clays/carbons/micro-mesoporous materials /inorganic-organic hybrids/related materials), their characterization and exploitation in chemical transformations is preferred. The candidates having experience in Product Development/Technology Innovation/Applied Technology etc. will be preferred.

Job Specification: The incumbent will be involved in projects related catalyst preparation, formulation and scale-up. He/she will also conduct independent research in the area of catalysis and inorganic materials.

POST CODE NO. 03

SCIENTIST - ONE POST (RESERVED FOR OBC)

DIVISION - POLYMER SCIENCE & ENGINEERING

Essential Educational Qualifications & Experience: ME/M. Tech. in Chemical Engineering or Polymer Engineering OR Ph.D. submitted in Chemical Engineering or Polymer Engineering.

Desirable Qualification and Experience: ME/M.Tech. (Chemical Engineering/Polymer Engineering) with minimum 2 years experience in the area of membrane science and technology or PhD submitted (chemical engineering/polymer engineering) in membrane science and technology.

Preference will be given to candidates having hands-on expertise in preparation of membranes (polymeric hollow fiber / supported) for gas / liquid separation, their characterization and applications in practical separation problems, characterization of polymer properties, experience in prototype/product development/technology innovation/applied technology.

Job Specification: The selected candidate is expected to work in a team engaged in the development of supported flat sheet/hollow fiber membranes for industrially relevant separation applications. He/she will be involved in the preparation of polybenzimidazoles and such other membranes for energy and separation applications, preparation of polymer dope solution, handling of operations of continuous membrane casting/spinning and relevant machines, making of spiral/hollow fiber membrane modules. The candidate is expected to contribute towards prototype design, preparation and demonstrations, and engineering aspects of membrane science (liquid/gas sorption, diffusion analysis of polymers, module design engineering, etc.). The candidate should have ability to learn, grasp and develop new techniques of membrane preparation and possess soft skills.

POST CODE NO. 04

SCIENTIST - ONE POST (RESERVED FOR OBC)

DIVISION - INTELLECTUAL PROPERTY GROUP

Essential Educational Qualifications & Experience: ME/M.Tech. in Chemical Engineering /Materials Engineering/ Bio Engineering OR Ph.D. submitted in Chemical Science/Polymer Science /Materials Science / Bio Science OR Ph.D. submitted in Chemical Engineering /Polymer Engineering / Materials Engineering / Bio Engineering.

Desirable Qualification and Experience: Minimum 1 year full-time work experience in Intellectual Property related activities (in IP attorney firm, patent service/support office, patent portfolio management, patent examination, analytics etc) is desirable. The preferred candidate should have a formal degree/ PG diploma in intellectual property/ patent law or be a DST Women Scientist Scheme - C fellow. A candidate who is a Registered Patent Agent will be given preference. Chemical/ Materials Sciences/ Engineering background is desirable. First class or min 60% or equivalent in undergraduate degree is desirable. Past experience in claim structuring/IP ownership and administration agreements will be a plus. Past exposure to tech development and/or commercialization is a plus. Candidate must demonstrate good written and oral communication skills and computer literacy.

Job Specification: The selected candidate will work as part of a team operating NCL's Intellectual Property Group (IPG) and offer patent related services to scientists. Activities of IPG includes interacting with inventors to define inventions, ensuring clarity in ownership and administration, patentability assessments and patent drafting (with help from service providers), interacting with the CSIR-HQ, maintaining records and databases, assistance in prosecution and addressing examiner queries, IP policy formulation and implementation and managing an IP portfolio etc.

POST CODE NO. 05

SCIENTIST - ONE POST (RESERVED FOR OBC)

DIVISION - NCL INNOVATIONS RESOURCE CENTRE

Essential Educational Qualifications & Experience: ME/M.Tech. in Chemical Engineering /Materials Engineering/ Bio Engineering OR Ph.D. submitted in Chemical Science/Polymer Science /Materials Science / Bio Science OR Ph.D. submitted in Chemical Engineering /Polymer Engineering / Materials Engineering / Bio Engineering.

Desirable Qualification and Experience: Minimum 1 year full-time, work experience in Market Research/Financial Modeling/ Business planning and incubation/ Tech transfer or experience as a founder of a startup is desirable. Formal training (diploma or degree) in intellectual property/ technology commercialization/technology entrepreneurship/ technology business incubation/ technology/innovation management is preferred. First class or min 60% or equivalent in undergraduate degree is desirable. A full-time MBA degree or PG Diploma with specializations in finance and/or technology management and/or marketing and/or entrepreneurship will be a plus. Past exposure to tech development and/or commercialization is a plus. Candidate must demonstrate good written and oral communication skills and computer literacy.

Job Specification: The selected candidate will work as part of the NCL Innovations Resource Centre team that aims to help strengthen NCL's technology pipeline and improve technology commercialization results. The candidate would be a key part of the "knowledge to value" chain that NCL is creating.

POST CODE NO. 06

SCIENTIST - ONE POST (UNRESERVED - PWD (ORTHOPEDICALLY HANDICAPPED))

DIVISION - NCL INNOVATIONS RESOURCE CENTRE / INTELLECTUAL PROPERTY GROUP

Essential Educational Qualifications & Experience: ME/M.Tech. in Chemical Engineering /Materials Engineering/ Bio Engineering OR Ph.D. submitted in Chemical

Science/Polymer Science /Materials Science / Bio Science OR Ph.D. submitted in Chemical Engineering /Polymer Engineering / Materials Engineering / Bio Engineering.

Desirable Qualification and Experience: Minimum 1 year full-time, work experience in Intellectual Property or technology commercialization or Innovation management activities is preferred. Formal Degrees/PG Diplomas in IP/ Patents Law, Finance, Marketing, Technology management is desirable. A candidate who is a Registered Patent Agent or a Certified for Financial Modeling/Planning/ Accounting etc will be given preference. Prior work experience in the Indian Patent Office, attorney firms, tech transfer offices, business incubators or as a founder of a startup company will be a plus. Chemical/ Materials Sciences/ Engineering background is desirable. First class or min 60% or equivalent in undergraduate degree is desirable. Past experience in claim structuring/IP ownership and administration agreements will be a plus. Past exposure to tech development and/or commercialization is a plus. Candidate must demonstrate good written and oral communication skills and computer literacy.

Job Specification: The selected candidate will work as part of the Intellectual Property Group or NCL Innovations Resource Centre teams in protecting IP or championing the commercialization and progress of technology to market/ use respectively.

POST CODE NO. 07

SCIENTIST - ONE POST (RESERVED FOR OBC)

DIVISION - CHEMICAL ENGINEERING & PROCESS DEVELOPMENT

Essential Educational Qualifications & Experience: ME in Chemical Engineering OR M.Tech. in Chemical Technology OR Ph. D submitted in Chemical Engineering OR Ph.D. submitted in Chemical Technology.

Desirable Qualification and Experience: Experience in pilot plant operations, actual hands on experience of process development relevant to fine and specialty chemicals and process intensification, with a proven record of excellence in research, as evidenced by publications in peer reviewed journals and/or patents in the relevant field. The candidates having experience in Product Development/Technology Innovation/Applied Technology

etc. will be preferred. For M. E. and M. Tech Candidates experience of more than three years in the above specified areas is preferable.

Job Specification: The incumbent will be involved in projects related to fine and specialty chemicals. He/she will also conduct independent research in the area of process /product development.

POST CODE NO. 08

SCIENTIST - ONE POST (RESERVED FOR ST)

DIVISION - CHEMICAL ENGINEERING & PROCESS DEVELOPMENT

Essential Educational Qualifications & Experience: Ph. D. submitted in Chemistry.

Desirable Qualification and Experience: Preference will be given to the candidates with Ph.D. in Chemistry with at least two years' experience in catalyst design involving multi-functional active sites, development of sustainable processes by catalytic routes with a proven record of excellence in research, as evidenced by publications in peer reviewed journals and/or patents in the field of catalysis / organo-catalysis / organo metallics heterogenization. The candidates having experience in Product Development/Technology Innovation/Applied Technology etc. will be preferred.

Job Specification: The incumbent will be involved in projects related to homo- and hetero-geneous catalysis leading to sustainable process development. He/She will also conduct independent research in the emerging areas of catalysis.

POST CODE NO. 09

SCIENTIST - ONE POST (UNRESERVED)

DIVISION - PHYSICAL & MATERIALS CHEMISTRY

Essential Educational Qualifications & Experience: Ph. D. submitted in Chemistry/ Materials Science.

Desirable Qualification and Experience: Candidates should have an exceptional record of research accomplishment with deep knowledge of the core of Materials Science, with experience in the synthesis, characterization and processing-structure-property correlation of advanced functional materials including ceramics. The applicant should be well versed with different materials characterization techniques having hands on experience. The

candidate having experience in Product Development/Technology Innovation/Applied Technology etc. will be preferred.

Job Specification: Development of advanced functional materials and ceramics for technological applications. Candidates should have experience or interest in working within interdisciplinary research teams and be committed to supporting institutional programmes on technology development.

POST CODE NO. 10

SCIENTIST - ONE POST (RESERVED FOR SC)

DIVISION - PHYSICAL & MATERIALS CHEMISTRY

Essential Educational Qualifications & Experience: Ph. D. submitted in Chemistry/ Materials Science.

Desirable Qualification and Experience: The candidate must have expertise in techniques and methods required for characterization of materials, including biomaterials. Experience in structural characterization utilizing techniques that are mainly based on X-ray, scanning probe and electron microscopic methods are desirable. Specific skills that would enhance a candidate's application for the position might include experience in setting up of measurement facilities and developing methods for material characterization based on the above mentioned techniques. The candidates having experience in Product Development/Technology Innovation/Applied Technology etc. will be preferred.

Job Specification: Development of newer material characterization techniques. The applicant is expected to carry out independent research and also coordinate programs related to the design and development of new measurement and characterization tools by interacting with other research groups.

POST CODE NO. 11

SCIENTIST - ONE POST (RESERVED FOR ST)

DIVISION - PHYSICAL & MATERIALS CHEMISTRY

Essential Educational Qualifications & Experience: Ph. D. submitted in Chemistry/ Materials Science.

Desirable Qualification and Experience: Working knowledge and research experience in experimental electrochemistry, with a strong background in interfacial electrochemistry and demonstrated capability in probing the phenomena at the electrode/electrolyte interface by a range of electrochemical techniques. Strong background in energy storage and conversion and electro catalysis with demonstrated fundamental research are desirable. The candidates having experience in Product Development/Technology Innovation/Applied Technology etc. will be preferred.

Job Specification: The candidate should develop a strong research program in electrochemistry as part of a larger team focused on the fundamental and application oriented research in electrochemistry, electro catalysis and surface science. The candidate should be highly innovative and should be able to work in a joint industrial and academic consortium for the development of renewable energy storage and conversion platforms.

POST CODE NO. 12

SCIENTIST - ONE POST (UNRESERVED)

DIVISION - BIOCHEMICAL SCIENCES

Essential Educational Qualifications & Experience: Ph. D. submitted in Biochemistry/ Biotechnology/Microbiology.

Desirable Qualification and Experience: Candidates having experience in protein engineering and application of enzymes for industrial biotechnology will be desirable. Also the candidates with Ph. D. degree in above areas and experience in Biochemistry, Biophysics, Structural biology and/or computational biology will be desirable. Candidate with at least 6 months' research experience in projects involving translational activity is preferred. The successful candidate should have a track record of quality scientific publications. The candidates having experience in Product Development/Technology Innovation/Applied Technology etc. will be preferred.

Job Specification: The selected candidate will have to work on biocatalysis for projects of high translational readiness levels and various other biochemical research programmes.

POST CODE NO. 13

SCIENTIST - ONE POST (RESERVED FOR SC)

DIVISION - BIOCHEMICAL SCIENCES

Essential Educational Qualifications & Experience: Ph. D. submitted in Microbiology/ Biotechnology/Biochemistry.

Desirable Qualification and Experience: Candidates having experience in fermentation technology/biomass biotransformation/valorization/ biorefining will be preferred. The candidate should be familiar with techniques in biochemistry, molecular biology & genetic engineering. The candidates having experience in Product Development/Technology Innovation/Applied Technology etc. will be preferred.

Job Specification: The selected candidate will have to run fermentations , monitoring of biocatalysis systems.

POST CODE NO. 14

SCIENTIST - ONE POST (RESERVED FOR OBC)

DIVISION - ORGANIC CHEMISTRY

Essential Educational Qualifications & Experience: Ph. D. submitted in Zoology/Agricultural Entomology/Entomology.

Desirable Qualification and Experience: Candidates should have expertise in the field of insect-plant interactions, in particular, mediation of interactions by chemical cues and signals affecting tritrophic interactions as well as related topics in chemical and sensory ecology, toxicological bioassays, analytical techniques (GC and GC-MS), as well as electrophysiological techniques (EAG, GC-EAD, tip-recording and SSR). The candidates having experience in Product Development/Technology Innovation/Applied Technology etc. will be preferred.

Job Specification: Research will encompass studies on chemical ecology using a combination of chemical analysis, behavioral bioassays to identify new and/or improved semiochemical attractants for insect control. Bioassays to determine the bioefficacy and persistence of synthetic molecules for the control of household pests.

POST CODE NO. 15

SCIENTIST - ONE POST (UNRESERVED)

DIVISION - ORGANIC CHEMISTRY

Essential Educational Qualifications & Experience: Ph. D. submitted in Chemistry.

Desirable Qualification and Experience: Preference will be given to candidates having experience in one or more of the following areas related to physical organic chemistry: structural organic chemistry, reactions in unconventional systems, reaction kinetics, stereochemistry and thermodynamics. The candidates having experience in Product Development/Technology Innovation/Applied Technology etc. will be preferred.

Job Specification: The selected candidate will be expected to carry out research in the area of physical organic chemistry (as above), build a vibrant research group as well as develop and teach physical organic chemistry courses to post-graduate students.

**DETAILS OF SCIENTIFIC POSITIONS (RS. 15600- 39100 (PB-3)
WITH GRADE PAY RS. 7600/- P.M.)**

POST CODE NO. 16

SENIOR SCIENTIST - ONE POST (UNRESERVED)

DIVISION - CATALYSIS & INORGANIC CHEMISTRY

Essential Educational Qualifications & Experience: Ph.D. in Chemistry or Chemical Science with 2 years of relevant experience OR Ph.D. in Chemical Engineering.

Desirable Qualification and Experience: Candidate with a minimum of 3 years of research experience after Ph.D. (as evidenced by publications in international peer reviewed journals/patents) in the areas of heterogeneous catalysis, catalyst characterization by (in-situ/operando) spectroscopy and renewable (biomass / CO₂) conversion to fuels/chemicals is preferred. The candidates having experience in Product Development/Technology Innovation/Applied Technology etc. will be preferred.

Job Specification: To carry out R & D in the area of heterogeneous catalysis for renewable. The incumbent is expected to conceive and initiate his/her own research projects in the

area of renewable conversion to fuels and chemicals and also to participate in the on-going research activities of the group/Laboratory.

POST CODE NO. 17

SENIOR SCIENTIST - ONE POST (UNRESERVED)

DIVISION - CATALYSIS & INORGANIC CHEMISTRY

Essential Educational Qualifications & Experience: Ph.D. in Chemistry or Chemical Science with 2 years of relevant experience OR Ph.D. in Chemical Engineering.

Desirable Qualification and Experience: Candidate with a minimum of 3 years research experience after Ph.D. (as evidenced by publications in international peer reviewed journals/ patents) in the areas of hydrogen generation by reforming / environmental catalysis / petrochemicals using solid catalysts is preferred. The candidates having experience in Product Development/Technology Innovation/Applied Technology etc. will be preferred.

Job Specification: To carry out R&D in the area of heterogeneous catalysis, hydrogen generation and petrochemicals. The incumbent is expected to conceive and initiate his/her own research projects in the above areas and also to participate in the on-going research activities of the group/Laboratory.

POST CODE NO. 18

SENIOR SCIENTIST - ONE POST (UNRESERVED)

DIVISION- POLYMER SCIENCE & ENGINEERING

Essential Educational Qualifications & Experience: Ph. D. in Chemistry with 2 years relevant experience.

Desirable Qualification and Experience: Ph. D. in Chemistry, in the field of polymers with minimum two years of postdoctoral research experience in polymer synthesis in institutes of high repute. The candidate must have hands-on experience in the synthesis of well-defined macromolecular architectures using controlled/living polymerization methods both in solution and/or in dispersion for various applications including

biomedical applications as demonstrated by proven record of publications. Preference will be given to candidates who have experience in product development, technology innovation and/or applied technology involving new tools/techniques of polymer synthesis.

Job Specification: The candidate is expected to design synthetic strategies for complex macromolecular architectures such as but not limited to end-functional block copolymers, amphiphilic polymers, etc based on fundamental understanding of structure-property relationships. The candidate is expected to use such polymers for various applications such as but not limited to functional coatings and adhesives, biomedical devices, specialized additives, etc. The candidate should have the ability to define independent research programs and collaborate effectively with other scientists for successful development of products/prototypes in the area of polymers/advanced materials. The candidate is expected to teach basic and advanced polymer chemistry courses to graduate students. The candidate is expected to write and defend research proposals to various funding agencies and participate in/lead CSIR's large multidisciplinary and multi-institutional research program initiatives.

POST CODE NO. 19

SENIOR SCIENTIST - ONE POST (UNRESERVED)

DIVISION : POLYMER SCIENCE & ENGINEERING

Essential Educational Qualifications & Experience: Ph.D. in Chemical Engineering or Materials Engineering or Polymer Engineering OR Ph.D. in Physics or Chemistry or Materials Science or allied areas with 2 years relevant experience.

Desirable Qualification and Experience: Candidates with a PhD in Chemical Engineering or Materials Engineering or Polymer Engineering or a PhD in Physics, Chemistry, Materials Science or allied areas with minimum 2 years post-doctoral training and with experience in X-ray diffraction techniques as applied to polymeric materials. Preference will be given to candidates who have contributed to advancements in methodology for X-ray diffraction or in solving crystal structures for synthetic semi crystalline polymers.

Preference will be given to the candidates with work experience in a university and/or research institute and/or industry on technology development programs in which structural characterization of semi crystalline polymers, and development of quantitative relationships between semi crystalline structure and polymer material properties has been an integral part of the program. Preference will also be given to candidates who have experience in product development, technology innovation and/or applied technology relating to X-ray techniques as applied to semi crystalline polymers. Additionally, the candidate should have demonstrated ability to undertake fundamental research in the area of polymer crystallization, as demonstrated through publications in high impact factor journals or patents.

Job Specification: The selected candidate is expected to lead a group on X-ray methods applied to semi crystalline polymers. The candidate will join a team of scientists and technologists that is focused on developing quantitative structure-property relations in semi crystalline polymers. To do this successfully, the candidate is expected to have clearly demonstrable expertise on the fundamentals of polymer crystallization, structural studies of polymer crystals and X-ray techniques as applied to the crystal structure of semi crystalline polymers. The candidate is expected to teach basic and advanced polymer physics courses to graduate students. The candidate is expected to write and defend research proposals to various funding agencies. In the long run, the candidate is expected to drive technology programs in semi crystalline polymers and participate in/lead CSIR's large multidisciplinary and multi-institutional research program initiatives.

POST CODE NO. 20

SENIOR SCIENTIST - ONE POST (UNRESERVED)

DIVISION - CHEMICAL ENGINEERING & PROCESS DEVELOPMENT

Essential Educational Qualifications & Experience: Ph.D. in Chemical Engineering.

Desirable Qualification and Experience: Two year`s post-doctoral research and development experience as evidenced by publications in peer reviewed journals/patents in the area of downstream processing of biopharmaceuticals. Preference will be given to candidate experienced in purification, production and characterization of

biopharmaceuticals. The candidates having experience in Product Development/Technology Innovation/Applied Technology etc. will be preferred.

Job Specification: The selected candidate is expected to conceive and undertake industry oriented applied research on her/his own in the area of recombinant microbial fermentations, animal cell cultivation, and downstream processing for recovery and purification of biomolecules.

CODE NO. 21

POST : SENIOR SCIENTIST - ONE POST (UNRESERVED)

DIVISION : CHEMICAL ENGINEERING & PROCESS DEVELOPMENT

Essential Educational Qualifications & Experience: Ph.D. in Chemical Engineering OR Ph.D. in Chemical Technology.

Desirable Qualification and Experience: Preference will be given to the candidates having at least two years of post-doctoral experience.

Candidate with a proven record of excellence in research and development, as evidenced by publications in peer reviewed journals and/or patents in the relevant field of chemical process engineering and/or process development, will be given preference. The candidates having experience in Product Development/Technology Innovation/Applied Technology etc. will be preferred.

Job Specification: To carry out R & D in the area of process engineering and process development of sustainable chemical processes and scale-up studies. The incumbent is expected to conceive and initiate research projects in the above areas and also to participate actively in the ongoing activities of the group, division, and laboratory. He/she is also expected to build-up leadership in the new and emerging areas of chemical engineering science.

POST CODE NO. 22

SENIOR SCIENTIST - ONE POST (UNRESERVED)

DIVISION - PHYSICAL & MATERIALS CHEMISTRY

Essential Educational Qualifications & Experience: Ph. D. in Chemistry with two years relevant experience.

Desirable Qualification and Experience: Minimum two years of postdoctoral research experience in the area of computational chemistry and molecular simulation of complex and biological systems. Experience of working on industry related projects would be desirable. The candidates having experience in Product Development/Technology Innovation/Applied Technology etc. will be preferred.

Job Specification: The selected candidate is expected to lead a research program on computational modeling and simulation of complex chemical and biological systems with emphasis on rational design of functional and biomimetic materials. The candidate should have demonstrated capability to collaborate with experimental research groups, where the computational modeling is substantially contributed to design and validation leading to new technology.

POST CODE NO. 23

SENIOR SCIENTIST - ONE POST (UNRESERVED)

DIVISION - BIOCHEMICAL SCIENCES

Essential Educational Qualifications & Experience: Ph. D. in Biochemistry/Biotechnology with 2 years experience in related areas.

Desirable Qualification and Experience: Candidates having experience in Biochemistry/biocatalysis applicable in product development, technology innovation will be given preference. Post doctoral experience of 3-5 years in a reputed laboratory in molecular & structural biology of membrane proteins and relevant research aimed at translational applications of industrially important/ pharmaceutical/therapeutic proteins is desirable. Eligible candidate conversant with biochemical & biophysical techniques, bacterial genomics or synthetic biology is advantageous.

Job Specification: To carry out R & D of proteins and other biomolecules to prepare for industrial and therapeutic applications by understanding structure -function relation and approaches using protein engineering and synthetic biology.

POST CODE NO. 24

SENIOR SCIENTIST - ONE POST (UNRESERVED)

DIVISION - ORGANIC CHEMISTRY

Essential Educational Qualifications & Experience: Ph.D. in Chemistry with 2 years of relevant experience.

Desirable Qualification and Experience: Preference will be given to candidates having doctoral research in the field of synthetic organic chemistry and minimum 2 years post-doc experience in the area of asymmetric synthetic methodologies and synthesis of bioactive natural products. The candidates having experience in Product Development/Technology Innovation/Applied Technology etc. will be preferred.

Job Specification: The selected candidate will be expected to carry out research in the area of catalytic asymmetric synthesis of natural products/small molecules.

POST CODE NO. 25

SENIOR SCIENTIST - ONE POST (UNRESERVED)

DIVISION - ORGANIC CHEMISTRY

Essential Educational Qualifications & Experience: Ph.D. in Chemistry with 2 years of relevant experience.

Desirable Qualification and Experience: Preference will be given to candidates having minimum 2 years post doc experience in NMR spectroscopy, application to small molecules and structure based drug design. The candidates having experience in Product Development/Technology Innovation/Applied Technology etc. will be preferred.

Job Specification: The selected candidate will be expected to carry out research on application of NMR spectroscopy, methodology development and cater the requirement of users of NMR resource centre.

General information and conditions:-

1. Benefits under Council service:

- a. These posts carry usual allowances i.e. Dearness Allowance (DA), House Rent Allowance (HRA), Transport Allowance (TA) etc. as admissible to the central government employees and as made applicable to CSIR. Council employees are also eligible for accommodation of their entitled type as per CSIR allotment rules depending on availability in which case HRA will not be admissible.
- b. Scientists in Pay Band-3 are eligible for 2 additional increments (without DA) and Professional update allowance of Rs.10000/- per annum.
- c. In addition to the emoluments indicated against each category of posts, benefits such as applicability of New Pension Scheme 2004, reimbursements of Medical Expenses, Leave Travel Concession, Conveyance advance and House Building Advance are available as per CSIR rules.
- d. Scientists in CSIR are also permitted to undertake consultancy and sponsored R&D project activity. These activities give them scope to earn consultancy fee and honorarium as per CSIR guidelines governing these activities. Opportunities also arise for foreign deputations for training/presentation of papers/specific assignments etc.
- e. CSIR provides excellent opportunities to deserving candidates for career advancement under Assessment Promotion scheme for Scientists.
- f. Deserving candidates may be considered for advance increment as per CSIR Rules.

2. Other conditions

- a. The applicant must be a citizen of India.
- b. All applicants must fulfill the essential requirements of the post and other conditions stipulated in the advertisement as on the last date of receipt of the applications. They are advised to satisfy themselves before applying that they possess at least the essential qualifications laid down for various posts as on the last date of receipt of the applications. No enquiry asking for advice as to eligibility will be entertained.

The prescribed essential qualifications are the minimum and the mere possession of the same does not entitle candidates to be called for interview. The duly constituted Screening Committee will adopt its own criteria for short-listing the candidates. The

candidate should therefore, mention in the application all the qualifications and experiences in the relevant area over and above the minimum prescribed qualification, supported with documents. Completion of Ph.D. degree will be reckoned from the date of issue of provisional certificate/notification.

- c. The application should be accompanied by self attested copies of the relevant educational qualification, experience. The prescribed qualifications should have been obtained through recognized Universities / Institutions. etc. Incomplete applications/applications received or not accompanied with the required certificates / documents **are liable to be rejected.**
- d. In respect of equivalent clause in Essential Qualifications, if a candidate is claiming a particular qualification as equivalent qualification as per the requirement of advertisement, then the candidate is required to produce order/letter in this regard, indicating the Authority (with number and date) under which it has been so treated otherwise the Application is liable to be rejected.
- e. The period of experience rendered by a candidate on part time basis, daily wages, visiting/ guest faculty will not be counted while calculating the valid experience for short listing the candidates for interview.
- f. If any document/ certificate furnished is in a language other than Hindi or English, a transcript of the same duly attested by a Gazetted officer or notary is to be submitted.
- g. The date for determining the upper age limit, qualifications and /or experience shall be the closing date prescribed for receipt of applications.
- h. The period of experience in a discipline / area of work, wherever prescribed, shall be counted after the date of acquiring the minimum prescribed educational qualifications prescribed for that Grade.
- i. Persons with disabilities (PWD) fulfilling the eligibility conditions prescribed under GOI instructions are encouraged to apply.
- j. Only outstation candidates called and found eligible for interview will be paid to and fro single second class rail fare from the actual place of undertaking the journey or from the normal place of their residence whichever is nearer to Pune Railway Station on production of Rail Tickets/Rail Ticket Numbers or any other proof of journey.
- k. Any discrepancy found between the information given in application and as evident in original documents will make the candidate ineligible for appearing in interview. Such candidate will not be paid any fare.

- l. The decision of the **Director, CSIR-National Chemical Laboratory (CSIR-NCL), Pune/CSIR** in all matters relating to eligibility, acceptance or rejection of applications, mode of selection and conduct of examination/interview will be final and binding on the candidates.
- m. Canvassing in any form and / or bringing any influence political or otherwise will be treated as a disqualification for the post.
- n. **NO INTERIM ENQUIRY OR CORRESPONDANCE WILL BE ENTERTAINED.**

3. Relaxations :

- a. The upper age limit is relaxable upto **05 years for SC/ST and 03 years for OBC** as per Government orders in force, **only in those cases where the post are reserved for respective categories**, on production of relevant **Caste/Category Certificate** in the prescribed **Government of India (GOI) format** signed by the specified authority.
- b. Upper age limit is also relaxable upto five years for the regular employees working in CSIR laboratories/institutes, Government Departments, autonomous bodies and public sector undertakings.
- c. As per GOI provisions, age relaxation for Widows, Divorced Women and Women Judicially separated from Husbands, the upper age limit is relaxable up to the age of 35 years (upto 40 years for members of Scheduled Castes/Scheduled Tribes and upto 38 years for members belonging to the Other Backward Classes in respect of the posts reserved for them) for Widows, divorced Women and Women Judicially separated from their Husbands who are not remarried. The persons claiming age relaxation under this sub-para would be required to produce following documentary evidence:
 - i) In case of Widow, Death Certificate of her husband together with the Affidavit that she has not remarried since.
 - ii) In case of divorced Women and Women judicially separated from their husbands, a certified copy of the judgment/decree of the appropriate Court to prove the fact of divorce or the judicial separation, as the case may be, with an Affidavit in respect of divorced Women and they have not remarried since.
- d. Age relaxation to Physically Handicapped (PH) persons: Age relaxation of 5 years is allowed (total 10 years for SCs/STs and 8 years for OBCs in respect of the posts reserved for them) to blind, deaf-mute and orthopedically handicapped persons for appointment to Group 'A' posts/services. The persons claiming age relaxation under

this sub-para would be required to produce a certificate in prescribed Proforma in support of their claims clearly indicating that the degree of physical disability is 40% or more. In any case, the appointment of these candidates will be subject to their being found medically fit in accordance with the standards of medical fitness as prescribed by the Government for each individual Group 'A' posts to be filled by Direct Recruitment by Selection.

❖ **Notes for PWD Orthopedically Handicapped (OH) candidates:**

- i. OH Candidates who suffer from not less than 40% of relevant disability should possess disability certificate issued by Medical Board duly constituted by Central or State Government, issued on or before last date of online submission of application.
 - ii. Only those OH candidates who have locomotor disability or cerebral palsy with locomotor impairment of minimum 40% and only those who fall in the following categories are eligible to apply:
 - OL - One leg affected (R or L)
 - (a) Impaired reach
 - (b) Weakness of grip
 - (c) Ataxic
 - iii. The OH candidate would be required to perform and discharge duties attached to the post and shall be required to meet one or more of the physical requirements/abilities, which are necessary for performing the following duties:
 - a. Work to be performed by Sitting
 - b. Work to be performed by Standing
 - c. Work to be performed by Bending
 - d. Work to be performed by Manipulation by Fingers
 - e. Work to be performed by Reading & Writing
 - f. Work to be performed by Seeing.
- e. Relaxation in age, over and above the stipulated limit, educational qualification and / or experience may be considered in case of exceptionally meritorious candidates or if sufficient number of candidates possessing the requisite qualification and/ or experience are not available to fill up the posts.

f. Relaxation of five years will also be permissible to those who had ordinarily been domiciled in the Kashmir division of the state of Jammu and Kashmir during the period from 1-1-1980 to 31-12-1989 subject to production of relevant certificate from concerned authority.

4. How to apply:

- a. Eligible candidates are required to apply **ONLINE only** through our website <http://recruit.ncl.res.in>, *followed by sending hard copy of online application, along with the mark sheets, certificates and other testimonial etc.*
- b. If the candidate does not have a valid email id, he/she should create a new valid email id before applying online.
- c. **Online Application will be available on our website <http://recruit.ncl.res.in> upto 10.04.2017.**
- d. The candidates are required to remit the application fee of Rs. 100/- in favour of '**Director, National Chemical Laboratory**' through online payment system i.e. NEFT / Bank Transfer/Net Banking etc, with the following details:
- **Bank Name: State Bank of India**
 - **Account No.:30267257846**
 - **IFSC Code No: SBIN0003552**
 - **Branch Code: 3552**
 - **Branch Name: NCL Campus Branch, Pune**

The candidates are required to generate acknowledgement of remitted application fee from the online payment system, containing UTR Number/ Transaction Number and Transaction Date and the same is required to be attached along with the hard copy of online application.

The last date for applying online application and remitting of application fee through online payment system is **10.04.2017**. This date will be the same for the candidates belonging to far-flung areas.

The following details must be filled up on back side of printed copy of generated acknowledgement of remitted application fee (i) Candidate's Name, (ii) Application ID (iii) Candidate's Category (iv) Post Code Applied For.



The candidates belonging to SC / ST / PWD / Women / CSIR Employees / Abroad Candidates category are exempted from submission of application fee.

- e. In case of universities/institute awarding CGPA/SGPA/OGPA grades etc., candidates are requested to convert the same into percentage based on the formula as per their university/institute.
- f. First time users need to register themselves by clicking on ' Register' tab. Candidate needs to supply his/her email id which will be used as a login id into the system. The activation link will be sent to that email id. After clicking that activation link, his/her account of NCL Recruitment Portal will be activated. Once it is activated, he/she may login and proceed for applying. Please note that candidate can apply for more than one post using a single login id.
- g. Once candidate logs in, he/she is required to select the post to apply and click 'Fill Application' against the post; he/she wishes to apply for. In case candidate has already logged in on a previous occasion and began the process of application, the top of the page will display the post/s for which he/she has already applied. Then he/she needs to click 'View' link to proceed.
- h. Candidates can then start filling the online application form which is divided into 11 parts., namely Personal Information, Academic Details, Doctoral Work, Paper Publications, No. of publications & Patents, Awards, Other Qualifications, Experience, CSIR Relatives, Application Fee Details and Enclosure . The first part to be filled in is the Basic information followed by the other parts.
- i. While filling the online application form, Candidates must fill Personal Information and Academic Details. If these details are not filled, online application form will not submitted.
- j. In case candidate feels that he/she has acquired some additional academic qualification which is relevant to the post advertised, he/she may enter that under 'Other qualification'. Please note that SSC and HSC details needs to be entered under 'Academic details' category and **not** to be entered under 'other qualification' category.
- k. If candidates do not have any relatives who are in service in CSIR, he/she does not need to fill up the part under 'Relatives'.
- l. The candidates are required to fill the details of online generated acknowledgement of remitted application fee viz. UTR / Transaction Number, Candidate's Bank Account Number , UTR /Transaction Date and Amount etc.

- m. After completely filling the online application form, candidates can save and take printout of the filled application in PDF format. Candidates need to note down “**Application ID**” carefully for future communication. **The candidates must sign on this computer generated printed application.**
- n. This computer generated application (Print-out) duly signed by the candidate and accompanied by attested copies of the certificates, mark sheets, testimonials in support of age, education qualifications, experience, re-prints of publications and caste certificate (if applicable), acknowledgement of remitted application fee (if applicable), along with one recent passport size self-signed photograph affixed, should be sent in an envelope superscribed “**APPLICATION FOR THE POST OF _____ (Post Code _____)**” by post to the address:- **Director, CSIR-National Chemical Laboratory, Dr. Homi Bhabha Road, Pune - 411008.** Candidates applying for more than one post must submit separate application form for each post indicating the Code No. of the post. The hard copy(s) of each application must be accompanied by separate online generated acknowledgement of remitted application fee.
- o. Application once made will not be allowed to be withdrawn and fees once paid will not be refunded on any count nor can it be held in reserve for any other recruitment or selection process.
- p. Applications from employees of Government Departments will be considered only if forwarded through proper channel, certified by the employer that the applicant, if selected will be relieved within one month of the receipt of the appointment orders. Also, vigilance clearance should also be recorded. However, advance copy of the application may be submitted before the closing date. Applications routed through proper channel should reach **Director, CSIR-National Chemical Laboratory (CSIR-NCL), Dr. Homi Bhabha Road, Pune - 411008** at the earliest.
- q. Candidates should specifically note that the applications received after the closing date for any reason whatsoever (such as envelopes wrongly addressed, delivered elsewhere, postal delay etc.) will not be entertained by **Director, CSIR-National Chemical Laboratory, Pune.**
- r. **Incomplete applications (i.e. unsigned, without photograph / application fee / applicable certificates / mark sheets / testimonials etc.) will not be entertained and will be summarily rejected.**

5. Following documents must be attached along with application form sent by post:

- a Copy of acknowledgement of remitted application fee, where applicable.
- b Coloured photograph pasted on the form and signed across in full.
- c Self Attested photocopy of Date of Birth Certificate.
- d Self Attested photocopies of education qualifications certificates.
- e Self Attested photocopy of **Caste/Category Certificate** in the prescribed **Government of India (GOI) format** signed by the specified authority, if applicable.
- f Self Attested photocopies of experience certificates, if any.



Date of commencement of online applications	: 10.03.2017
Last date for receipt of online applications	: 10.04.2017
Last date for receipt of hard copy applications	: 03.05.2017

Sd/-
(Administrative Officer)

