

12TH ASIAN BIOLOGICAL INORGANIC CHEMISTRY CONFERENCE (ASBIC-12) · NOVOTEL, JAIPUR, INDIA · 16–20 DECEMBER 2026

The Second Coordination Sphere - Opportunities beyond Bench

Your science is the metal centre. This session is about everything arranged around it.

An evidence-based employability workshop for MSc, PhD and postdoctoral researchers in biological inorganic chemistry.

AsBIC-12 convenes the region's strongest early-career bioinorganic chemists — almost all training toward an academic pathway that will absorb only a minority, in a market repricing skills faster than curricula can adapt. This session replaces career anxiety with market evidence, a personal skills-gap diagnosis and understanding for each attendee leaving the room on how to upskill themselves.

1 in 4

workers globally are in an occupation with some generative-AI exposure — transformation, not replacement.

ILO–NASK GLOBAL INDEX, 2025

39% / 63%

of core job skills change by 2030; 63% of employers call the skills gap their biggest barrier.

WEF FUTURE OF JOBS, 2025

–14%

fall in hiring of 22–25-year-olds into AI-exposed roles, with no rise in unemployment. Pressure is on entry, not exit.

ANTHROPIC, MARCH 2026

+62%

wage premium for roles requiring AI skills, up from 57%; postings grew 69% against 9% overall.

PWC AI JOBS BAROMETER, 2026

THE GAP THIS SESSION CLOSSES

Two mismatches, both largely invisible from inside a research group.

WHAT THE DEGREE CERTIFIES

Depth on one specialised research problem
Data generation at bench scale
Publications, posters and citations
Tool operation — instruments, software, AI assistants
Written argument addressed to peer specialists

WHAT THE EMPLOYER SCREENS FOR

Ability to frame a commercial or regulatory problem
Data handling, validation and inference at scale
Quantified outcome and business consequence
Judgement about when the tool is wrong
Articulation for non-specialist decision-makers

The destination gap. 78% of science graduate students rate an academic research career as a likely destination for themselves (Nature survey, n = 3,451). The share of US science and engineering PhDs holding a tenure-track post within five years of graduating fell from 27.0% in 1993 to 17.7% in 2015; 28.6% of sanctioned faculty posts across the IITs, NITs and IISERs stood vacant in January 2025 — vacancy is not access.

Why AI fluency alone is not the answer. Prompting with LLMs is a baseline expectation, not a differentiator. PwC finds AI-exposed entry-level roles seven times more likely to demand traditionally senior human skills — judgement, leadership, stakeholder communication. The apprenticeship rung is being removed; this session shows how to arrive already standing on it.

SESSION ARCHITECTURE — A FIVE-PART ARC

MODULE	CONTENT
1 The Reality Check	What the ILO, WEF and Anthropic data actually say about scientific careers, and how to separate the signal from the headline. Where hiring has slowed, where it has not, and what that means for a 2027–2030 job search.
2 Degree ≠ Employability	Knowledge, skill and attitude as three separable assets. What a recruiter does in the first 30 seconds of a CV, what an applicant tracking system does before that, and why strong research output alone clears neither.
3 The Skills That Travel	The 2030 skill stack: analytical thinking, data fluency, AI judgement and validation, scientific communication, adaptability. Why operating an AI tool is not an AI skill — and what verification, framing and accountability look like in practice.
4 The Unexplored Map	Fifteen-plus roles that recruit chemists and life scientists but are rarely taught: regulatory affairs, product stewardship, IP and patent analytics, scientific publishing, medical science liaison, technical services, bioinformatics, CRO clinical operations, technology transfer and science policy — with their real entry requirements.
5 Soft skill training as first step	CV versus résumé and when each applies. Rewriting a thesis line in industry voice. Professional email and the art of articulation. LinkedIn for visibility, networking and job search. Skill mapping and a term-by-term upskilling timeline that fits around an ongoing degree.
Q Open floor	Questions to the ACS team on career pathways, publishing and international mobility.

WHAT EVERY DELEGATE LEAVES WITH

- A defensible read of their own labour market sourced rather than anecdotal.
 - A ranked personal skills-gap map against employer criteria.
 - Three named target roles, with the entry requirements for each.
 - One thesis bullet rewritten in industry voice, with a number in it.
 - An upskilling plan, plus continuing access to ACS Virtual Internship Capsule resources and a participation certificate.
- More details: <https://virtualinternship.info/>

FORMAT & REQUIREMENTS

DURATION	60 minutes + Open Floor
SLOT	[TBD]
AUDIENCE	All registered MSc, PhD and postdoctoral delegates; mentors welcome. Capacity; no limit
DELIVERED BY	ACS Publications and Global Strategy for Society Programs teams.
ROOM	Projector (16:9), roving microphone, delegate wi-fi for the live self-assessment.
PRE-WORK	Five-minute self-assessment circulated by QR one week ahead. Pre-read modules on ACS-Virtual Internship Capsule

EVIDENCE BASE ILO & NASK, *Generative AI and Jobs* (2025) · WEF, *Future of Jobs Report 2025* · Massenkoff & McCrory, *Labor Market Impacts of AI*, Anthropic (2026) · PwC, *2026 Global AI Jobs Barometer* · National Science Board, *Science & Engineering Indicators 2018* and the Nature graduate survey (2015) · Rajya Sabha Standing Committee on Education, *Demands for Grants 2025–26* (faculty vacancy data, January 2025). All figures are cited live in the session deck.