

Undergraduate & postgraduate education in Paper Science and Technology: current provision and prospects

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- **Current provision:**

• ~~Current provision:~~

- City & Guilds: stopped mid-90's
- Bury College: HNC no offer since 2010
- Robert Gordon: Diploma stopped around 2000
- UMIST/UoM: BSc last intake 2000, graduated 2003
MSc campus-based stopped late 90's
MSc Distance learning stopped 2005
PhD occasional self-funded overseas

- **Rewind 30 years:**

UMIST, Paper Science, class of '89:

- 14 graduated (12 ♂, 6 ♀)
- 2 BPBIF 'George Rackley' scholarship
- 8 sponsored – most after “VIth form seminar”
- Most had summer work in the industry
- 2 went on to higher degrees
- 11 joined paper industry and allied trades
- 1 went to other manufacturing sector
- Expectation of a career in the paper industry

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 - Most had summer work in the industry
 - 2 went on to higher degrees; 1 joined paper industry 1992
 - 11 joined paper industry and allied trades
 - 1 went to other manufacturing sector
 - Expectation of a career in the paper industry
- Industry support during & before study
- 12/14 → paper industry

- **Where are they now?**

UMIST, Paper Science, class of '89:

- 3 in paper industry & allied trades
- 4 other industries
- 1 maths teacher
- 1 IT professional
- 4 unknown, almost certainly not paper industry
- 1 academic

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- 3 in paper industry & allied trades } 75% attrition from paper industry
- 4 other industries
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Transferrable
skills!
Paper Science
degree wasn't
over-specialised

• **Most industrialized countries retain Paper Science UG & PG programmes**

- USA: Wisconsin, Maine, NSCU, SUNY, GTech, Miami
- Canada: UBC (MSc)
- France: Grenoble
- Germany: Munich, Darmstadt
- Austria: Graz (MSc)
- Sweden: KTH
- Finland: HUT, Abo Akademi, Oulu
- Poland: Lodz
- India: IIT Roorkee
- China: SCUT
- Australia: Monash

Where paper science courses exist, they boast 100% graduate employment

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- India: IIT Roorkee
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(Forest) bio-products and
biotechnology
Natural Materials...

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- **Prospects**

- Industry needs to decide:
 - if it needs graduates that understand paper science...
 - ...if they paper science should be a 'major'...
 - ...if so, how many graduates needed?
- If there is a demand for graduates, then...

- **Prospects**

- How will industry help recruit students:
 - Sponsorships
 - Summer jobs
 - Graduate jobs at graduate salaries?
- How will the activity will be funded:
 - initially
 - continuing?
- What sort of university could develop and deliver the curriculum...

- **Closing perspectives: does the paper industry need graduates?**

- Each year, at around this time, someone from the paper industry or allied trades contacts me to ask about availability of graduates.
- The answer to almost every technical enquiry that I've received from the paper industry in the past few years used to be covered in the first year of the Paper Science undergraduate curriculum.