

Advance your career in science

with professional recognition that showcases
your **experience, expertise and dedication**

Stand out from the crowd

Prove your commitment
to attaining excellence in
your field

Gain the recognition you deserve

Achieve a professional
qualification that inspires
confidence and trust

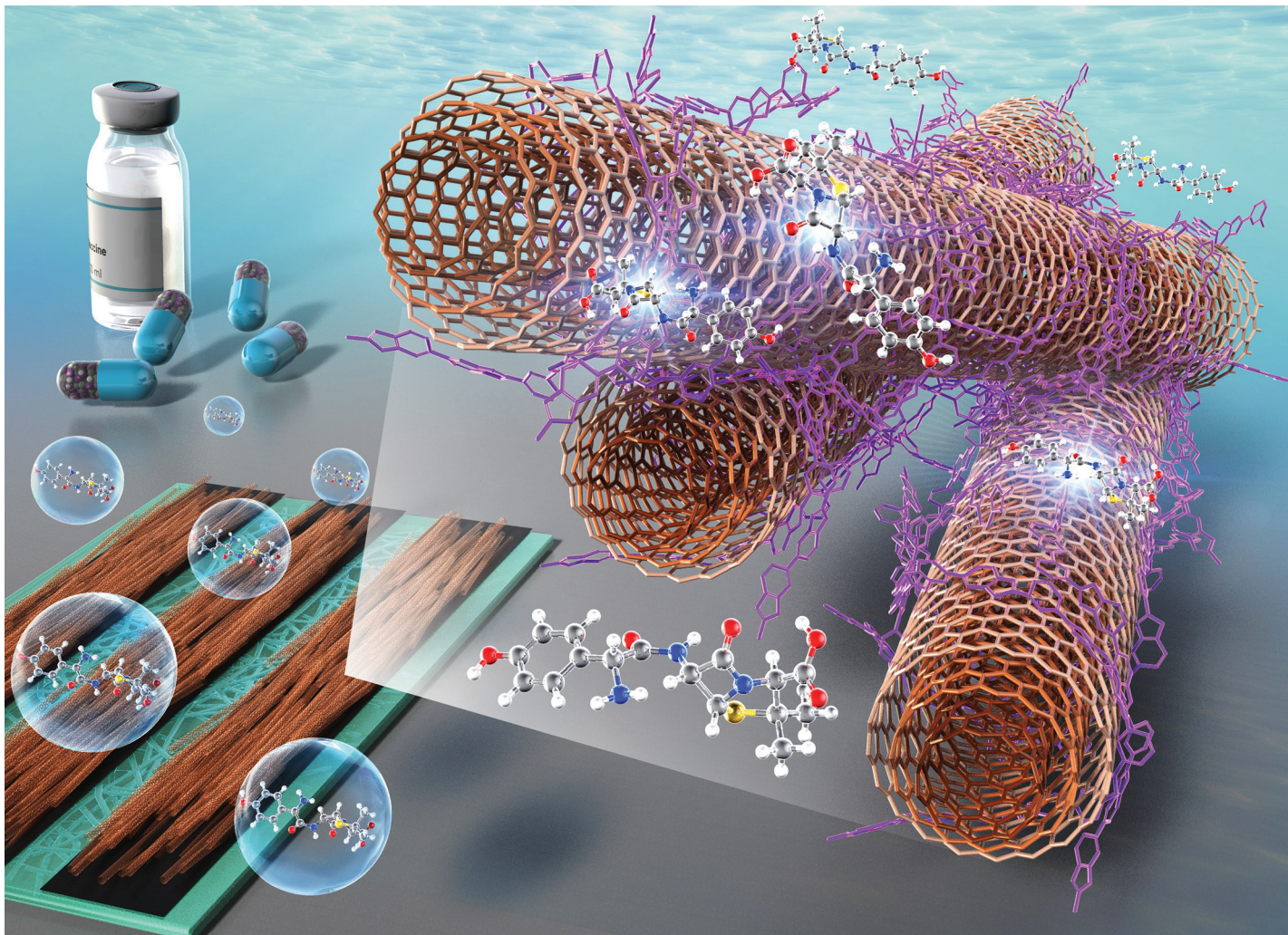
Unlock your career potential

Apply for our professional
registers (RSci, RSciTech)
or chartered status
(CChem, CSci, CEnv)

Apply now

rsc.li/professional-development



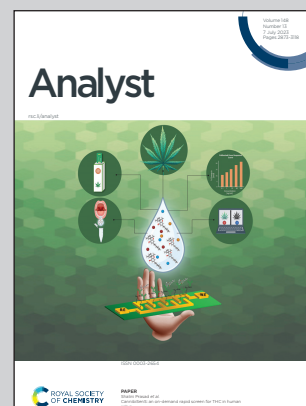


Showcasing research from electrochemistry laboratory of Professor Masato Tominaga, Graduate School of Science and Engineering, Saga University, Japan.

A green cellulose nanofiber-based printed electrode for practical highly sensitive amoxicillin detection

A green electrochemical sensor for amoxicillin detection was developed using a CNF thin-film platform modified with PBI-wrapped MWCNTs. Materials used to fabricate the CNF-based printed electrode are biodegradable and readily disposable. This printed electrode possessed high sensitivity and a wide detection range of amoxicillin. The reaction mechanisms and kinetics at the electrode interface were electrochemically investigated and found to be dependent on the amoxicillin concentration. The printed electrode also used for simple amoxicillin determination in seawater and tap water via "soaking method" with satisfactory results, promising a great potential for practical and environmentally friendly water monitoring.

As featured in:



See Shaimah Rinda Sari *et al.*, *Analyst*, 2023, **148**, 2932.