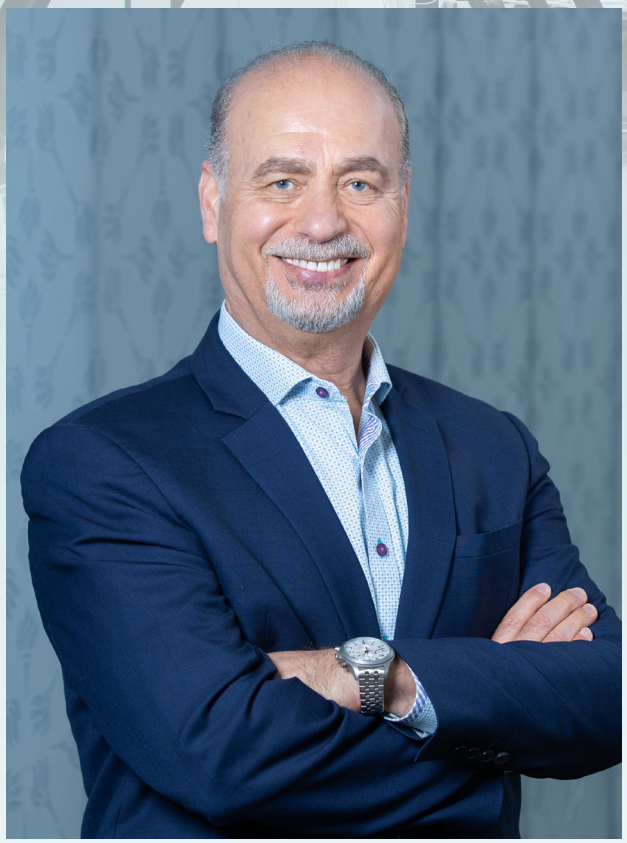
NYU ABU DHABI
WATER
RESEARCH
CENTER

NYUAD **WATER RESEARCH CENTER**

MESSAGE FROM OUR DIRECTOR PROFESSOR NIDAL HILAL



Professor Nidal Hilal, DSc, PhD, CEng, FIChemE, FLSW
Director of NYUAD Water Research Center

"By bringing together faculty from Engineering and Science across the NYU network, The Water Research Center (NYUAD-WRC) at New York University Abu Dhabi has established a strong foundation towards becoming a world-renowned innovation hub for advancing interdisciplinary water research where scientific knowledge can be transformed into practical solutions. Our lab is the first of its kind in the MENA region to have both pilot-scale membrane as well as membrane module manufacturing and testing equipment to allow design of new systems for desalination and wastewater treatment. By doing things differently we are making a significant change.

With our innovative cross-cutting research in water desalination, wastewater treatment and sustainability, NYUAD-WRC is perfectly positioned to address global water security and sustainability challenges both regionally and internationally."

IMPACT

Contributing to our world-changing research, the NYUAD Water Research Center is home to some of the brightest minds in science and engineering. Our researchers, publishing more than 50 research papers per year in high impact journals, have gained global recognition as top cited scholars with world leading expertise in their fields:

RANKED NO. 1 INTERNATIONALLY (GOOGLESCHOLAR):

- Membrane Separation
- Nanofiltration
- Membrane Distillation

RANKED NO. 2 INTERNATIONALLY (GOOGLESCHOLAR):

- Reverse Osmosis

RANKED AMONG TOP 10 INTERNATIONALLY (GOOGLESCHOLAR):

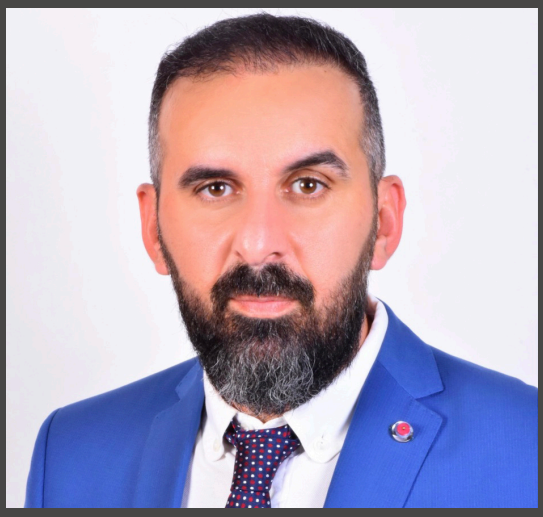
- Desalination – Ranked no. 7

RESEARCH TEAM LEADERS

RAED HASHAIKEH, Professor of Mechanical Engineering is Co-Principal Investigator at the NYUAD-WRC and Team Leader for Engineering/Materials

Affiliation: NYU Abu Dhabi
Education: PhD McGill University
rh143@nyu.edu

Research Areas: Advanced Materials, Nanofibers, Membranes, Desalination



ALI TRABOLSI, Professor of Chemistry and Program Head of Chemistry is Co-Principal Investigator at the NYUAD-WRC and Team Leader for Science/Chemistry

Affiliation: NYU Abu Dhabi
Education: BSc Lebanese University; MS, PhD University of Strasbourg
ali.trabolsi@nyu.edu

Research Areas: Materials for Health and Environment

JOHN BURT, Associate Professor of Biology is Co-Principal Investigator at the NYUAD-WRC and Team Leader for Science/Biology

Affiliation: NYU Abu Dhabi
Education: PhD, MS, University of Windsor, Canada; BS, Cape Breton University, Canada; PGCE, University of Sunderland, UK;
john.burt@nyu.edu

Research Areas: Marine Biology

GOALS

- To harness practical solutions for the water sector through technology transfer activities and engagement of local and regional stakeholders: industries, businesses and organizations in both the public and private sector.
- To generate educational opportunities and foster human capital through relevant training initiatives and degree programs.
- To develop a unique framework of research and education to advance integrated water research to tackle water challenges in the region and beyond.
- To place the UAE in a leading position for cutting-edge multidisciplinary research and development in water technologies, in line with the UAE's vision for water security and sustainable use of resources.

FACILITIES

The NYUAD-WRC boasts the MENA region's most advanced lab focused on water research, distinguished by its ability to develop and test membrane modules from nano to industrial scales.

Equipped with pilot-scale manufacture and testing equipment, we explore new designs and materials for water-related technologies, complemented by field studies exploring the effects of these processes and materials on the environment.

RESEARCH PROJECTS

At NYUAD-WRC we integrate both fundamental and applied research in the areas of advanced desalination technologies, membrane separations, wastewater treatment and re-use as well as environmental impact of water treatments.

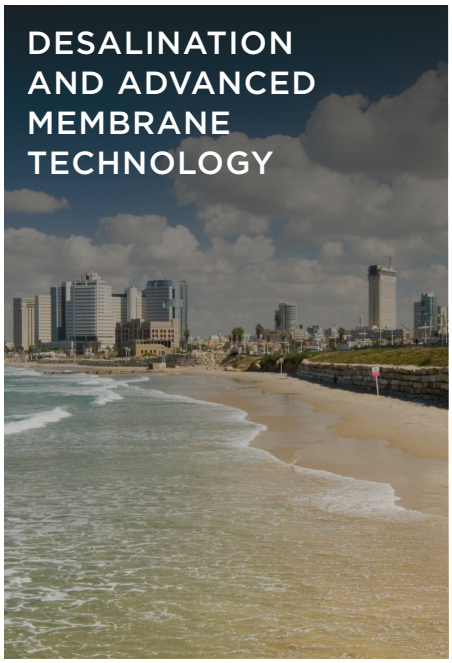
Our projects aim to form an understanding of synthesis of multi-functional polymers, development of novel membranes and processes for sustainable desalination and water treatment, and the environmental implications of brine discharge into the Arabian Gulf.

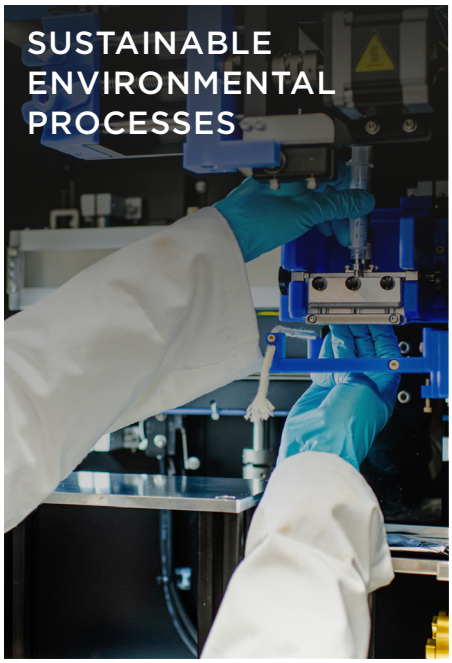
PARTNERS

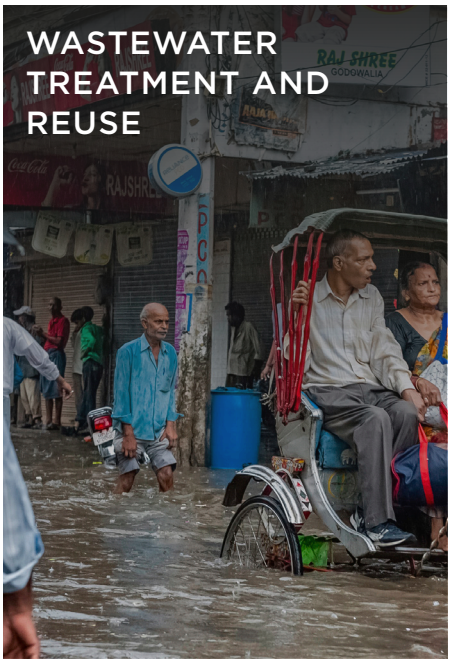
Our partners include both regional and international public and private sector entities. These include some members of our Advisory Board who are key industry and government stakeholders of the water, energy, infrastructure and agriculture sectors.

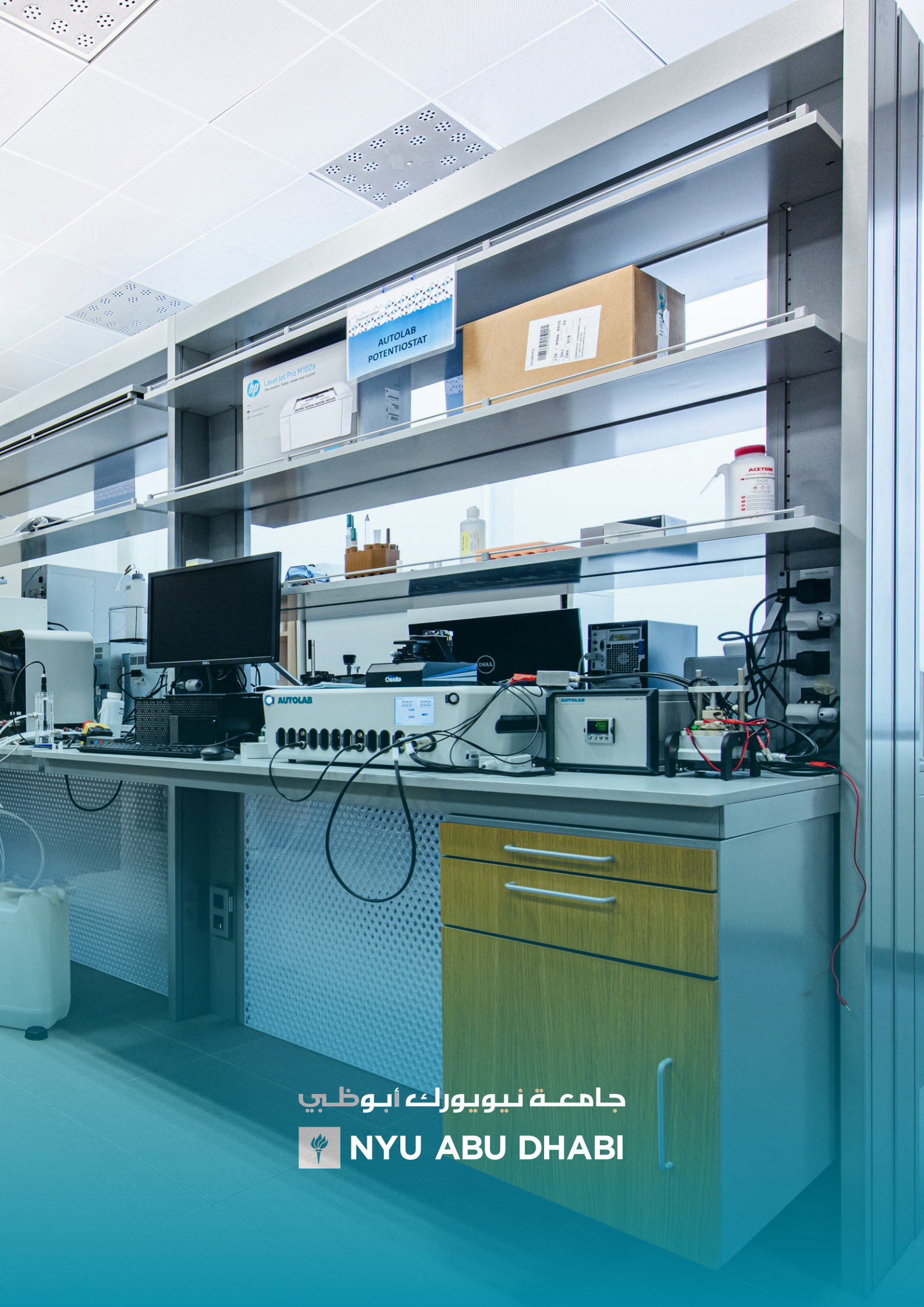
Our partners are involved throughout early research stages into product development and pilot testing phases of new technologies. This initiative enables research questions to be geared towards existing industrial needs, liaising between industry requirements and corresponding research methodologies and outputs. Early discussions ensure that the conducted research is aligned with practical needs and is applicable to the needs of private and public entities as well as the UAE's vision.

FOCUS REAERCH AREAS
AT THE NYUAD-WRC









جامعة نيويورك أبوظبي

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