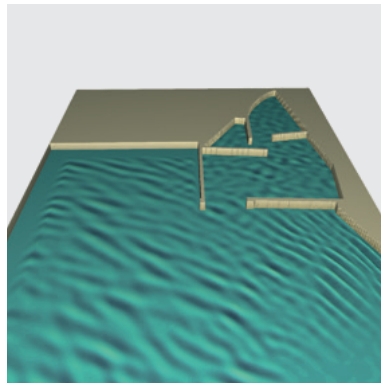
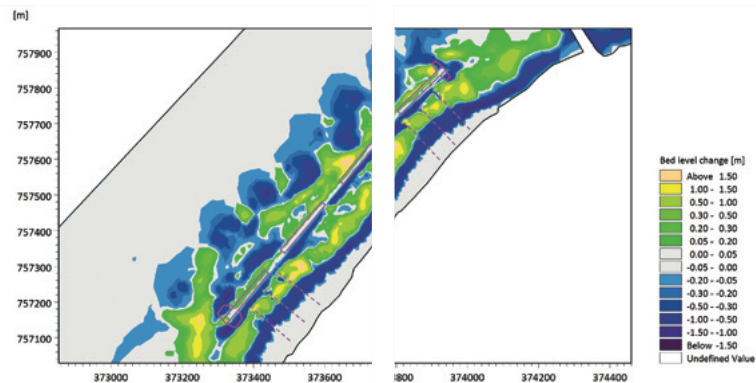




# MARITIME INSTITUTE GDYNIA MARITIME UNIVERSITY



## ARITIME HYDROTECHNICS AND ELECTRONICS DEPARTMENT



The Maritime Hydrotechnics and Electronics Department is engaged in research and development mainly covering sea areas and the coastal zone. The MHED closely cooperates with other Maritime Institute Departments and Laboratories. The conducted surveys, expert analyses and projects are primarily commissioned by maritime offices, scientific institutions, design companies and enterprises operating in the coastal zone and at sea.

The Marine Electronics Laboratory provides electromagnetic field measurement services for OHS and environmental protection purposes. These measurements are performed based on applicable regulations and standards for which the Laboratory has been certified by the Polish Centre for Accreditation.

The basic range of the MHED's activities include:

### COASTAL PROTECTION, IN PARTICULAR:

- planning artificial beach nourishment along the coast and lagoon shores;
- assessing sediment usability for artificial beach nourishment;
- assessing natural and technical conditions of seashores;
- modelling lithodynamic processes of the coastal zone;
- designing protection methods for sea and lagoon shores.

STATISTICAL ANALYSES OF THE MARINE ENVIRONMENT'S IMPACT ON MARINE AND OFFSHORE STRUCTURES



AB 848

## MODELLING OF WAVE PROPAGATION IN PORT AQUATORIA

- numerical wave-current analyses in water bodies;
- modelling wave propagation in port aquatoria in the context of potential development and modernisation of harbour infrastructure.

## NUMERICAL MODELLING OF MARINE SEDIMENT AND SUSPENDED MATTER TRANSPORT IN SEA AREAS

- modelling the dispersion of suspended solids generated by dredging and underwater operations conducted along water fairways in ports and harbours;
- modelling the dispersion of suspended solids generated by wind farm construction.

## MARINE ACOUSTICS

- underwater noise
- sound propagation modelling

## ENVIRONMENTAL IMPACT ASSESSMENT OF INVESTMENTS

- preparing and developing environmental documentation - environmental impact assessments, environmental impact assessment reports, and environmental scoping reports for investments situated in the coastal zone and sea areas - in compliance with the applicable provisions of law;
- environmental impact assessments for proposed seashore protection investments;
- preparing applications for sea disposal of dredged material along with marine environmental impact assessment reports for investments involving sea disposal of dredged material.

## MARINE ELECTRONICS LABORATORY

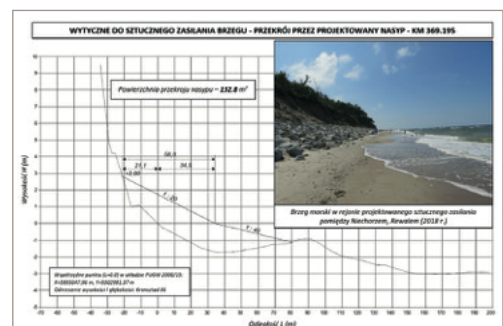
Measuring electromagnetic fields for occupational health and safety (OHS) purposes:

- radio communication and radio navigational aid apparatus
- medical equipment
- industrial machinery
- laboratory equipment
- other non-standard devices

Measuring electromagnetic fields for environmental protection purposes

## TOOLS AND EQUIPMENT

Mike 21 software, GIS toolkit, ArcGIS software, Golden software Surfer and Golden software Grapher, electromagnetic field meters: SMP3 DUAL, NBM-520, EMR-300C, ESM-100, SMS-102.



## CONTACT

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