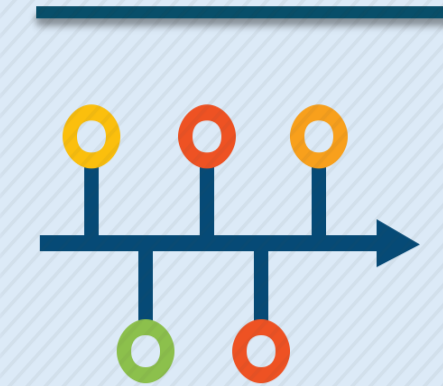
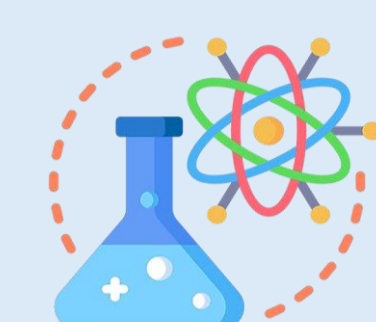
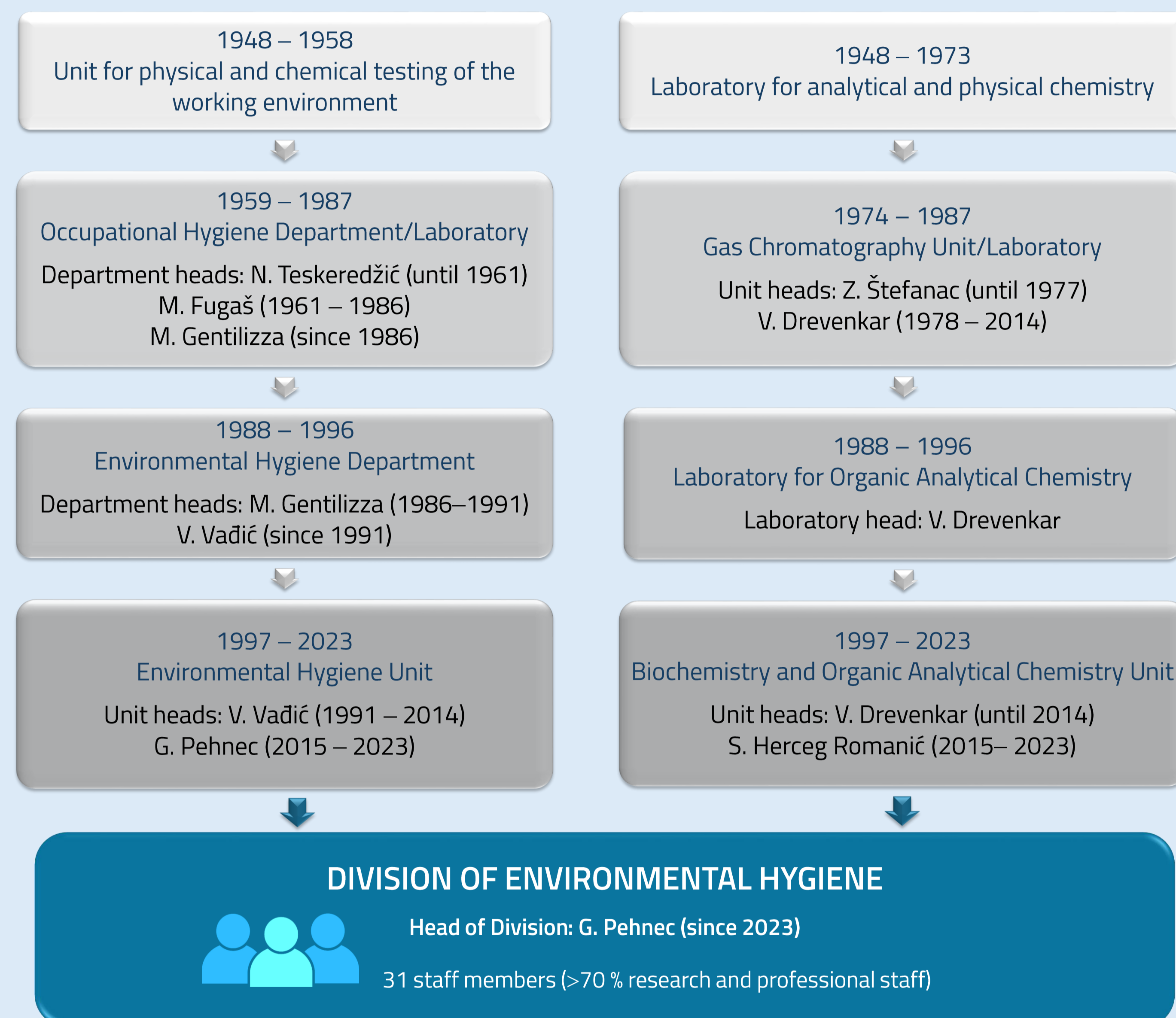




DIVISION OF ENVIRONMENTAL HYGIENE



DIVISION'S DEVELOPMENT CHRONOLOGY



SCIENTIFIC RESEARCH

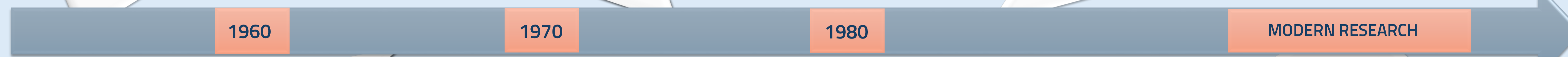
DIVISION'S MAIN ACTIVITY

Monitoring and study of pollutants in environmental and biological samples; the development and validation of analytical methods for their determination.

- Monitoring of workplace air pollution and assessment of workers' exposure
- Study of the interactions of metals and organic ligands

- Cooperation with the World Health Organization - Collaborating laboratory for air pollution
- Development of chromatographic methods for the determination of organophosphorus compounds in the aquatic environment, monitoring various classes of pesticides in biological and environmental samples
- First measurements of persistent organic pollutants (POPs) in breast milk in Croatia

- Beginning of indoor air pollution measurements (households, offices, schools, kindergartens, etc.)



- First air quality measurements in ambient air in Zagreb and Croatia



- Ambient and indoor air quality with regard to priority pollutants that can adversely affect the environment and human health:
 - polycyclic aromatic hydrocarbons, nitrogen oxides, sulfur dioxide, ozone, toxic metals, volatile organic compounds, particulate matter (PM₁₀, PM_{2.5}, PM₁), ultrafine particles, black carbon, microplastics
- Environmental pollution (water, soil, sediment, air, dust, moss, pollen) and exposure of living organisms to pollutants:
 - persistent organic pollutants (POPs) regulated by the Stockholm Convention: polychlorinated biphenyls, organochlorine pesticides, polybrominated diphenyl ethers, perfluoroalkyl substances
 - trace elements, pesticides, so-called new flame retardants, polycyclic aromatic hydrocarbons, etc.



A large part of the Division's research is carried out within the NextGenerationEU: EnvironPollutHealth project (2024 – 2027) with a focus on:

- AIR QUALITY
- HUMAN BIOMONITORING
- FRESHWATER AND MARINE ENVIRONMENTS BURDEN
- DEVELOPMENT AND STANDARDIZATION OF NEW ANALYTICAL METHODS



PROFESSIONAL SERVICES

AIR QUALITY MEASUREMENT SERVICES INCLUDE:

- ✓ SO₂, NO₂, CO, O₃, benzene, ammonia, hydrogen sulphide and mercaptans in ambient air
- ✓ particulate matter PM₁₀ and PM_{2.5} in ambient air
- ✓ polycyclic aromatic hydrocarbons, anions and cations, metals, and organic and elemental carbon in particulate matter
- ✓ total deposited matter (TDM) and metal content in TDM



The Division is an accredited testing laboratory according to the HRN EN ISO/IEC 17025 standard by the Croatian Accreditation Agency (HAA) in the area described in the annex to the Accreditation Certificate No 1288.

1960 – today
2003 – today

Air quality measurements at the stations of monitoring network of the City of Zagreb
Particulate matter measurements at some of the stations of National Network for Continuous Air Quality Monitoring

2014

IMROH is in charge of carrying out measurements in the National Network for Continuous Air Quality Monitoring (according to the Air Protection Act), in the part related to the determination of the physical and chemical composition of particulate matter and the preparation of equivalence studies of non-reference methods for measurements of particulate matter

MONITOR
AIR
QUALITY



ZAGREB



EKO ZAGREB



CROATIA

Basic and applied scientific research in the fields of **biomedicine and health**, **biotechnical sciences** and **natural sciences** is carried out within scientific research projects financed by European and national funds and government bodies:

- European Commission economic recovery package NextGenerationEU
- European Research and Innovation Programme Horizon Europe
- European Regional Development Fund
- European Commission Joint Research Centre (JRC)
- UN Environment Programme: International Atomic Energy Agency (IAEA)
- Croatian Recovery and Resilience Plan: Targeted Scientific Research
- Croatian Science Foundation (research and installation research projects)
- Croatian Academy of Sciences and Arts Foundation
- Bilateral and multilateral cooperation in the field of science and technology
- Relevant ministries and national agencies

