ORGANIZATION
Central Institute for Labour Protection - National Research Institute (CIOP-PIB)

PATRONAGE
- Polish Minister of Economic Affairs and Labour
- Horizontal Committee of Notified Bodies for the PPE Directive

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Spółdzielnia Inwalidów ZGODA (Disabled Workers Cooperative)
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Central Institute for Labour Protection - National Research Institute (Poland)

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Peter Paszkiewicz, Ph.D.
Prof. Edward Szucht, Ph.D.
Prof. Bogusław Wiśniewski, Ph.D.
Jan Wójczyński, Ph.D.

SESSION 5B: Selection and use of personal protective equipment
Chairperson: Adam Lipowczan, Central Mining Institute, Poland
Co-chair: Eero Korhonen, FIOH, Finland

11:30 Protection against falls from height by means of retractable type fall arresters arranged horizontally
Krzysztof Bączczyński, CIOP-PIB, Poland

11:45 Selection, use, care and maintenance of protective clothing
Henk Vanhoutte, European Safety Federation (ESF)

12:00 Protecting recovery boiler workers against hot chemical splashes
Helena Mäkinen, Sanna Karkkula, Susanna Mäki, Hanna Koskinen, FIOH, Finland

12:15 Comfort of using protective clothing
Stefan Brzeziński, Grażyna Malinowska, Teresa Nowak, Institute of Textile Materials Engineering, Poland

12:30 Barriery of protective materials towards liquid chemicals in different use conditions
Sylwia Kiszumińska, Krzysztof Łęzak, CIOP-PIB, Poland

12:45 Assessment of usage comfort of respiratory protective devices in practical performance tests
Agnieszka Brochocha, Krzysztof Makowski, CIOP-PIB, Poland

13:00 Discussion

13:15 CONCLUSIONS and CLOSURE

13:30 Lunch

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Dear Colleagues,

European Union regulations on occupational safety and health and on the internal market require that personal protective equipment (PPE) used in the working and living environment should ensure ultimate protection in the anticipated conditions of use. At the same time it should be adapted to the users' psychophysical conditions and needs. Due to the diversity of hazards, their changing intensity and the increasingly recognized ergonomic aspects of the work process, it is necessary to disseminate the results of research and implementation work carried out to develop new testing methods and assessment criteria. It is also necessary to introduce training courses and tools supporting selection and use of new designs and materials for PPE. This process should be supported by a dialogue and exchange of experience among research institutes and certification bodies, PPE users, designers and manufacturers.

The enlargement of the European Union by the New Member States, and of the internal market by new economic entities, has created an additional need for an exchange of information and experience especially in the field of the compliance of PPE with the health, safety and ergonomics requirements and conformity assessment procedures laid down in the Directive 89/686/EEC, as well as with the market surveillance rules.

The programme of the Conference includes the following topics:

- Research in development and use of personal protective equipment
- New technologies in production of personal protective equipment
- Standardization in the field of personal protective equipment
- Problems of market surveillance of personal protective equipment
- Selection and use of personal protective equipment.

The Conference is organized under the honorary patronage of the Polish Minister of Economic Affairs and Labour and the Horizontal Committee of Notified Bodies for the PPE Directive. The Conference is an important event of the project TEST-PRO-SAFETY-LIFE (Centre for Testing and Measurement for Improvement of Safety of Products and Working Life), which is carried out within the 5th Framework Programme of the European Union.

The Organizing Committee expresses its heartfelt thanks to members of the Scientific Committee of the Conference for their effort and great involvement.

I hope you will enjoy both the scientific programme of the Conference and the historical monuments of the royal city of Cracow.

Dr. Daniel Podgórski
Chair of the Organizing Committee
9:00 REGISTRATION

10:00 OPENING
Danuta Koradecka
Central Institute for Labour Protection - National Research Institute, Poland
Wojciech Maj
Industrial Policy Department of the Ministry of Economic Affairs and Labour, Poland
Eberhard Christ
Horizontal Committee of Notified Bodies for the PPE Directive

10:40 PLENARY LECTURE
Improvement of standards for Personal Protective Equipment - a European approach, Joachim Lambert, KAN, Germany

11:00 Coffee break

11:30 SESSION 1A: Research in development and use of personal protective equipment
Chairperson: Norman West, HSL, UK
Co-chair: Jean-Claude Cannot, CTC Environment, France

11:30 Objective testing of the conspicuity performance of high-visibility warning clothing
Michel Longrée, Jean Léonard, CENTEXBEL, Belgium
Johan Wagemans, University of Leuven, Belgium

11:45 Signalization of chemicals permeation through protective gloves
Katarzyna Szczecińska, CIOP-PIB, Poland

12:00 A physically rigorous model for heat transfer between the wearer of personal protective equipment and the environment
Robin Howie, Robin Howie Associates, UK

12:15 Metabolic and respiratory demands in fire-fighting - implications for protective equipment
Ingvar Holmér, Lund University, Sweden

12:30 Laboratory measurement of attenuation of high level impulse noise by hearing protectors
Jan Żera, Rafał Milyński, CIOP-PIB, Poland

12:45 Discussion

13:00 Lunch

14:30 Definition of a standard for footwear protecting against chemicals and micro-organisms
Jean-Claude Cannot, CTC Environment, France

14:45 PPE for pesticide applicators: performance of protective clothing materials with repellent finishes
Anugrah Shaw, Sivarangini Pagadala
University of Maryland Eastern Shore, USA

15:00 Discussion

15:15 Coffee break

15:45 SESSION 4: Problems of market surveillance of personal protective equipment
Chairperson: Daniel Podgórski, CIOP-PIB, Poland
Co-chair: Henk Vanhoutte, European Safety Federation

15:45 The impact of market surveillance on the improvement of PPE's quality: the Spanish experience
Jesús Portillo, Manuel Montes, INSHT, Spain

16:05 The activities of the National Labour Inspectorate in the field of supervision and inspection of personal protective equipment
Tomasz Gdowski, National Labour Inspectorate, Poland

16:35 Organization of the market surveillance system for personal protective equipment used in mining plants in the light of hitherto experience
Jan Migda, Piotr Wawrzyńczok, State Mining Authority, Poland

16:50 Discussion

17:00 End of the session

19:00 Dinner at Collegium Maius of the Jagiellonian University
<table>
<thead>
<tr>
<th>Time</th>
<th>Session/Note</th>
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<tbody>
<tr>
<td>11:30</td>
<td>PLENARY LECTURE</td>
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<tr>
<td></td>
<td>The contribution of the research to the European Standardization</td>
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<td>on PPE. Evaluation of the situation and prospects</td>
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<td>Alain Mayer, INRS, France</td>
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<td>11:50</td>
<td>SESSION 3A: Standardization in the field of personal protective equipment</td>
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<tr>
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<td>Chairperson: Joachim Lambert, KAN, Germany</td>
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<td>Co-chair: Grażyna Bartkowiak, CIOP-PIB, Poland</td>
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<td>11:50</td>
<td>Normative requirements for the respiratory protective equipment</td>
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<td>for escape with chemically connected oxygen (KO). The analysis of the</td>
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<td>examination methods and the technical requirements according to EN 13794</td>
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<td>Mirosław Bagiński, Central Station of Mining Rescue, Poland</td>
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<td>12:05</td>
<td>Standardised testing of hearing protectors and their effectiveness</td>
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<td>Martin Liedtke, BGIA, Germany</td>
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<td>12:20</td>
<td>Practice-oriented test standard for the evaluation of protective clothing</td>
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<td>against the risks of an electrical arc. CICTS 50354 Box Test</td>
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<td>Holger Schau, TUI, Germany, Hendrik Beier, STPI, Germany</td>
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<td>12:35</td>
<td>Reflections on European Directive 89/688 Annex II and Standardization on PPE</td>
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<td>Siegfried Assmann, ALWIT GmbH, Germany</td>
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<td>12:50</td>
<td>Discussion</td>
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<td>13:00</td>
<td>Lunch</td>
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<td>14:00</td>
<td>PLENARY LECTURE</td>
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<td>Globalisation and the European PPE market</td>
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<td>Henk Vanhoutte, European Safety Federation (ESF)</td>
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<td>14:20</td>
<td>SESSION 1B: Research in development and use of personal</td>
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<td>Chairperson: Eberhard Christ, Horizontal Committee of Notified Bodies</td>
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<td>Co-chair: Bogusław Więcek, Technical University of Lodz, Poland</td>
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<td>14:20</td>
<td>Structural resistance of PPE to ultra-high-pressure (U.H.P) water jets</td>
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<td>Patrice Marchal, INRS, France</td>
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<td>14:35</td>
<td>The influence of flow patterns on the break through performance</td>
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<td>of toxic industrial materials on various filter canister</td>
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<td>Leo Steenweg, Marco Linders, Sven van der Gijs, TNO Defence and Safety, The</td>
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<td>Netherlands</td>
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<td>14:50</td>
<td>Scientific approach to creating head protecting PPE. Evaluating force of</td>
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<td>Vladimir Efimovich Rodin, Labour Safety Scientific Research Institute, Russia</td>
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<td>15:05</td>
<td>Thermographic study on hand cooling process caused by vasoconstriction in a</td>
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<td>Agnieszka Andrzejewska, CIOP-PIB, Poland</td>
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<td>15:35</td>
<td>Discussion</td>
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<td>15:50</td>
<td>Coffee break</td>
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</table>
16:20  SESSION 1C: Research in development and use of personal protective equipment
Chairperson: Karl-Heinz Noetel, BG BAU, Germany
Co-chair: Martin Liedtke, BGIA, Germany
Grzegorz Owczarek, CIOP-PIB, Poland
Michel Jacques, INRS, France
16:20  Uncertainty of measurement in testing of personal protective equipment
Grzegorz Owczarek, CIOP-PIB, Poland
Michel Jacques, INRS, France
16:35  Safety critical testing of slip resistance properties of footwear
Mike Wilson, SATRA Technology Center, UK
16:50  Dynamics of microclimate formation in safety footwear
Wiesława Kamińska, CIOP-PIB, Poland
17:05  Protective elements in the protective and safety footwear
Ewa Woźniak, Zbigniew Olejniczak, Agnieszka Milewicz, Bogusław Woźniak, Leather Industry Institute, Poland
17:20  Respiratory protection equipment assessment criteria and their real use conditions
Piotr Pietrowski, CIOP-PIB, Poland
17:35  Discussion
17:45  End of the session