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Editor

Systems, Decision and Control in Energy V

 Springer

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General Energy Institute of the NAS
of Ukraine
Kyiv, Ukraine

ISSN 2198-4182 ISSN 2198-4190 (electronic)
Studies in Systems, Decision and Control
ISBN 978-3-031-35087-0 ISBN 978-3-031-35088-7 (eBook)
<https://doi.org/10.1007/978-3-031-35088-7>

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Peculiarities of Specialized Software Tools Used for Consequences Assessment of Accidents at Chemically Hazardous Facilities



Oleksandr Popov , Taras Ivaschenko , Liudmyla Markina ,
Teodoziia Yatsyshyn , Andrii Iatsyshyn , and Olha Lytvynenko 

Abstract An effective response to emergencies at chemically hazardous facilities under various circumstances is only possible with software modeling tools. They allow for determining the affected area, forecasting changes in its scale, and assessing risks to public health due to such events' occurrence. The article critically analyzes the existing specialized software tools used in various countries to determine accident consequences of technogenic objects. Such objects are potential sources of emergencies associated with significant environmental pollution. The work results of these software tools are given, and their strengths and limitations in their application in solving practical problems are shown.

Keywords Accident · Chemically hazardous objects · Software tools · Modeling

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A. Zaporozhets (ed.), *Systems, Decision and Control in Energy V*, Studies in Systems,
Decision and Control 481, https://doi.org/10.1007/978-3-031-35088-7_45

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