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DRES Database of Methods for the Analysis of Chemical Warfare Agents

BY

Paul. A. D'Agostino, Lionel R. Provost & James R. Hancock

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ABSTRACT

DRES analytical methods have been published regularly in the open literature along with the methods developed by others for CW agent sample preparation and analysis. Several years ago the key bibliographic information from this database of papers was entered into Procite, a searchable bibliographic database program. Update of the database continues as an ongoing effort and the DRES Database of Methods for the Analysis of Chemical Warfare Agents is available in hardcopy form or as a softcopy Procite or Wordperfect file. One hundred and fifty literature entries have been made as of May 1997.

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INTRODUCTION

The Canadian Forces may be called on to perform peacekeeping or battlefield operations in regions of the world where there is a significant threat of chemical warfare (CW) agent use. To operate effectively in these theatres the CF must be able to identify the chemical warfare agent(s) being used. Development of instrumental analytical methods for the identification and confirmation of these compounds is an important CF requirement that is addressed by DRES analytical researchers. Mass spectrometry (MS) and gas and liquid chromatography (GC and LC), core capability areas in the analytical sciences at DRES, form the basis for current analytical methods for the identification and confirmation of CW agents. In-house methods have been validated during NATO and UN analytical exercises with improvement continuing through the exploitation of new analytical technologies such as electrospray mass spectrometry and capillary electrophoresis.

DRES analytical methods have been published regularly in the open literature along with the methods developed by others for CW agent sample preparation and analysis. Several years ago the key bibliographic information from this database of papers was entered into Procite, a searchable bibliographic database program. Update of the database continues as an ongoing effort and the DRES Database of Methods for the Analysis of Chemical Warfare Agents is available to TTCP panel members in hardcopy form or as a softcopy Procite or Wordperfect file. One hundred and fifty literature entries have been made as of May 1997, with the complete list following alphabetically.

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