

Accepted Manuscript

How can analysts use multicriteria decision analysis?

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PII: S0165-9936(18)30125-0

DOI: [10.1016/j.trac.2018.05.003](https://doi.org/10.1016/j.trac.2018.05.003)

Reference: TRAC 15147

To appear in: *Trends in Analytical Chemistry*

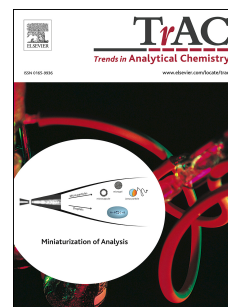
Received Date: 18 March 2018

Revised Date: 2 May 2018

Accepted Date: 3 May 2018

Please cite this article as: M. Bystrzanowska, M. Tobiszewski, How can analysts use multicriteria decision analysis?, *Trends in Analytical Chemistry* (2018), doi: 10.1016/j.trac.2018.05.003.

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1 **How can analysts use multicriteria decision analysis?**

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10 **Abstract:** Proper decision making in multifacitated situation is very challenging task. It is
11 especially difficult if there are many alternatives and criteria that are often contradictory.
12 Analytical chemistry and related sciences involve many situations where decisions on complex
13 problems are made. The support tools may be the use of MCDA (Multi-criteria Decision
14 Analysis) algorithms. They formalize the decision process, make it transparent in all its aspects.
15 In this review the application of MCDA methods in analytical and some related sciences is
16 presented. The main areas of utilization are selection of proper materials and selection or
17 optimization of processes. Their potential areas of applications are far from being fully explored.
18 This review provides useful insights into the MCDA methods usage in analytical chemistry field
19 that can stimulate the application of these tools in complex decision making processes.

20

21 **Keywords:** Sustainable Chemistry; Green Chemistry; Analytical Chemistry; MCDA; MCDM

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