

Accepted Manuscript

Title: Parallel comparison of *in situ* Raman and NIR spectroscopies to simultaneously measure multiple variables toward real-time monitoring of CHO cell bioreactor cultures

Authors: Mengyao Li, Bruno Ebel, Fabien Chauchard, Emmanuel Guédon, Annie Marc



PII: S1369-703X(18)30188-8
DOI: <https://doi.org/10.1016/j.bej.2018.06.005>
Reference: BEJ 6969

To appear in: *Biochemical Engineering Journal*

Received date: 9-2-2018
Revised date: 4-6-2018
Accepted date: 5-6-2018

Please cite this article as: Li M, Ebel B, Chauchard F, Guédon E, Marc A, Parallel comparison of *in situ* Raman and NIR spectroscopies to simultaneously measure multiple variables toward real-time monitoring of CHO cell bioreactor cultures, *Biochemical Engineering Journal* (2018), <https://doi.org/10.1016/j.bej.2018.06.005>

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Title

Parallel comparison of *in situ* Raman and NIR spectroscopies to simultaneously measure multiple variables toward real-time monitoring of CHO cell bioreactor cultures

Names of the authors

Mengyao Li ^a, Bruno Ebel ^{a*}, Fabien Chauchard ^b, Emmanuel Guédon ^a, Annie Marc ^a

Affiliation of the authors

^a Laboratoire Réaction et Génie des Procédés, UMR 7274, CNRS-Université de Lorraine, 2 avenue Forêt de Haye, TSA 40602, 54518 Vandœuvre-lès-Nancy, France

^b INDATECH, 4 rue Georges Besse, 34 830 Clapiers, France

Email addresses of all authors

Mengyao.Li@ univ-lorraine.fr

Bruno.Ebel@univ-lorraine.fr

Emmanuel.Guedon@univ-lorraine.fr

Annie.Marc@univ-lorraine.fr

FChauchard@indatech.eu

Corresponding author

Email address: Bruno.Ebel@univ-lorraine.fr

Telephone: +33 (0) 3 72 74 39 75

2 avenue Forêt de Haye, TSA 40602, 54518 Vandœuvre-lès-Nancy, France

Highlights

- First comparison study of *in situ* NIR and Raman spectroscopies for CHO cell cultures monitoring.
- NIR and Raman spectra were recorded in parallel in the same bioreactor cultures.
- Six culture variables including antibody concentration were monitored simultaneously.

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