



## Professor Lovre Krstulovic-Opara

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<http://marjan.fesb.hr/~opara/>

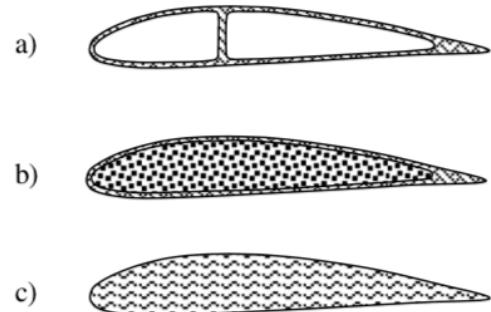
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### Education:

2000 Dr.-Ing.(Ph.D.), Universität Hannover, Institut für Baumechanik und Numerische Mechanik.  
1997 M.Sc., University of Zagreb, Faculty of Mechanical Engineering & Naval Architecture, Institute of Applied Mechanics.  
1994 Dipl.-Ing., University of Zagreb, Faculty of Mechanical Engineering & Naval Architecture, Institute of Applied Mechanics.

### Selected Publications:

- M. Vesenjak, I. Duarte, J. Baumeister, H. Göhler, L. Krstulović-Opara, Z. Ren; "Bending Performance Evaluation of Aluminium Alloy Tubes Filled with Different Cellular Metal Cores", *Composite structures*, 234, 111748, 2020.
- N. Nejc, M. Vesenjak, I. Duarte, S. Tanaka, K. Hokamoto, L. Krstulović-Opara, B. Guo, P. Chen, Z. Ren; "Compressive Behaviour of Closed-Cell Aluminium Foam at Different Strain Rates", *Materials*, 12, 4108, 2019.
- L. Krstulović-Opara, M. Vesenjak, I. Duarte; "Infrared evaluation of dynamic loaded tubular structural members with cellular fillers", Book of Abstracts of the International Conference on Multifunctional Cellular Materials, eds. Duarte, Vesenjak, Ren, InCell 2019, 19.-20. September, 2019, Maribor, Slovenia, 61, 2019.
- S.C. Pinto, P.A.A.P. Marques, M. Vesenjak, V. Romeu, L. Krstulović-Opara, I. Duarte; "Multifuncional hybrid foams composed by aluminium open-cell foam filled with polymers", Book of Abstracts of the International Conference on Multifunctional Cellular Materials, eds. Duarte, Vesenjak, Ren, InCell 2019, 19.-20. September, 2019, Maribor, Slovenia, 69, 2019.



- I. The three main types of the wind turbine blade cross-section:  
a) shell shaped internal structure (roving) with strengthening  
b) shell shaped blade (roving) with foam core (polyurethane)  
c) shaped blade with fully filled structure

From: L. Krstulovic-Opara, B. Klarin, Ž. Domazet: "A Non-Destructive Wind Turbine Blade Analysis Based on the Thermal Stress Analysis", Proceedings of the International Symposium on Coupled Methods in Numerical Dynamics, CMND 2009, eds.: Z. Terze, C. Lachor, 16-19 September 2009, Split, Croatia, 255-265, 2009.

K. Hokamoto, M. Nishi, M. Vesenjak, Z. Ren, L. Krstulović-Opara: "Fabrication of uni-pore materials through explosive compaction using cylindrical geometry", Book of Abstracts of the International Conference on Multifunctional Cellular Materials, eds. Duarte, Vesenjak, Ren, InCell 2019, 19.-20. September, 2019, Maribor, Slovenia, 39, 2019.

M. Džoja, V. Cvitanic, M. Safaei, L. Krstulović-Opara: "Modelling the plastic anisotropy evolution of AA5754-H22 sheet and implementation in predicting cylindrical cup drawing process", European Journal of Mechanics / A Solids, 77, 103806, 2019.

P. Bagavac, L. Krstulović-Opara, Ž. Domazet: "Infrared Thermography of Steel Structure by FFT", Materials Today: Proceedings, 12, 298–303, 2019.

L. Krstulović-Opara, P. Bagavac, A. Božanić, Ž. Domazet: "NDT of composites based on active infrared thermography and ultrasounds testing", Proceedings of 6th Congress, Mechanical engineers days, eds: M. Kuliš Šiško, Ž. Dorić, 20-23 March 2019., Vodice, Croatia, 192-197, 2019. (in Croatian)

L. Krstulović-Opara, M. Vesenjak, Ž. Domazet, I. Duarte: " Plastic yielding characterization based on middle wave thermography ", International Conference on Advanced Materials, Mechanics and Manufacturing - Proceeding, eds.:Mounir Kchaou, Mohamed Taoufik Khabou, 17-19 December 2018., Hammamet, Tunisia, 25, 2018.

P. Bagavac, L. Krstulović-Opara, Ž. Domazet: "Pulse Phase Thermography Impact Damage Retrieval", Materials Today: Proceedings, 5, 26578–26583, 2018.

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K. Hokamoto, K. Shimomiyab, M. Nishi, L. Krstulović-Opara, M. Vesenjak, Z. Ren: "Fabrication of unidirectional porous-structured aluminum through explosive compaction using cylindrical geometry", Journal of materials processing technology, 251, pp. 262-266, 2018.

A. Pehilj, L. Krstulović-Opara, P. Bagavac, M. Vesenjak, I., Ž. Domazet: "The detection of plastic flow propagation based on the temperature gradient", Materials Today: Proceedings, 4, 5925–5930, 2017.

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