## Candidate supervisor's information summary form

| Name and surname, degree, title: Aleksander Lisowski, PhD, DSc, Prof. | |
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| Discipline/disciplines of science | Mechanical engineering |
| Professional development (degrees and titles) in chronological order | **1989** – PhD, Faculty of Agricultural and Forestry Engineering, WULS.<br>**2000** – DSc, Institute for Building, Mechanization and Electrification in Agriculture, Warsaw.<br>**2007** – Prof. |
| Most important publications/patens over the last 3 years (maximum 10) | **Lisowski A.**, Pajor M., Świętochowski A., Dąbrowska M., Klonowski J., Mieszkalski L., Ekielski A., Stasiak M., Piątek M. Effects of moisture content, temperature, and die thickness on the compaction process, and the density and strength of walnut shell pellets. Renewable Energy. 2019, 141, 770-781, 10.1016/j.renene.2019.04.050, 30 p., IF=6,274.<br>**Lisowski A.**, Olendzki D., Świętochowski A., Dąbrowska M., Mieszkalski L., Ostrowska-Ligęza E., Stasiak M., Klonowski J., Piątek M.. Spent coffee grounds compaction process: Its effects on the strength properties of biofuel pellets. Renewable Energy. 2019, 142, 173-183, DOI: 10.1016/j.renene.2019.04.114, 30 p., IF=6,274.<br>Mieszkalski L., **Lisowski A.**, Klonowski J. **Patent** EP3123846A1 Active blade of row weeder; uzyskany 08.05.2019. Europejski.<br>Mieszkalski L., **Lisowski A.**, Klonowski J. **Patent** EP3123847A1 Tilting blade of row weeder; uzyskany 08.05.2019. Europejski.<br>**Lisowski A**., Wójcik J., Klonowski J., Sypuła M., Chlebowski J., Kostyra K., Nowakowski T., Strużyk A., Świętochowski A., Dąbrowska M., Mieszkalski L., Piątek M. Compaction of chopped material in a mini silo. Biomass and Bioenergy, 2020, 139, 100 p., IF=5,061.<br>**Lisowski A**., Matkowski P., Mieszkalski L., Mruk R., Stasiak M., Piątek M., Świętochowski A., Dąbrowska M., Obstawski P., Bakoń T., Karpio K. Influence of fraction particle size of pure straw and blends of straw with calcium carbonate or cassava starch on pelletising process and pellet. Materials. 2020, 13, 4623; 140 p, IF=3,623.<br>Matkowski P., **Lisowski A.**, Świętochowski A. The effect of compacted dose of pure straw and blends of straw with calcium carbonate or cassava starch on pelletising process and pellet quality. Journal of Cleaner Production. 2020, 277, 1-12, 140p, IF=9,297.<br>Piątek M., **Lisowski A**., Dąbrowska M. The effects of solid lignin on the anaerobic digestion of microcrystalline cellulose and application of smoothing splines for extended data analysis of its inhibitory effects. Bioresource Technology. 2021, 320, 1-7, 140 p., IF=9,642.<br>**Lisowski A.**, Świętochowski A., Dąbrowska M., Klonowski J., Nowakowski T., Chlebowski J., Tryskuć P., Parys T., Ferre S., Roberge M. Effect of Stone Impacts on Various Ground Engaging Tools (Flexible/Stiff Tines and Coulter): Part. Materials. 2022, 15, 1568: 1-23; 140p, IF=3,623. |

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| | **Lisowski A.**, Świętochowski A., Dąbrowska M., Klonowski J., Nowakowski T., Chlebowski J., Tryskuć P., Parys T., Ferre S., Roberge M. Kinetics and dynamics of the stiff and flexible tines with the duckfoot and the coulter after impact with stones embedded in compacted soil: Part II. Materials. 2022, 15, 1351: 1-27; 140p, IF=3,623 |
| Experience in work with doctoral students (defended doctoral dissertations, doctoral programmes opened) in chronological order | defense 27.06.2006<br>defense 21.11.2006<br>defense 18.11.2008<br>defense 23.11.2010<br>defense 01.04.2014<br>defense 03.11.2015<br>defense 03.11.2015<br>defense 29.06.2021<br>defense 29.09.2021<br>supervisor 17.12.2019 |
| Project/grants achievements (from the last 10 years | Pressure agglomeration of biomass and physical properties of fuels formed from energy crops, NSC, N N313 126439, 2010-2013, thesis grant, manager.<br>The use of Capacitive Computed Tomography to monitoring the flow of plant mass flow, NCRD, PBS2/A8/18/2013, 2013-2016, research grant, manager (Partner). |
| Topic – research problem – for which the candidate supervisor seeks a doctoral student | Conversion of biomass into biogas or solid fuels. Physical relations of the working element - soil. Modeling of physical processes of separation and densification of biological materials. |
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