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Sune Svanberg

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Sune Svanberg, 男, 瑞典人, 华南师范大学特聘教授(Part-time)、硕士研究生导师。瑞典皇家科学院(Royal Academy of Sciences)和瑞典皇家工程院(Royal Academy of Engineering Sciences)两院院士(曾任诺贝尔奖物理评奖委员会委员10年, 其中2年担任主席)。1967年~1973年在哥德堡大学任副研究员; 1974年~1979年在哥德堡大学任副教授; 1980年~2009年在隆德大学任教授, 原子物理组组长; 1995年~2010年在隆德大学任隆德激光中心主任; 2011年至今, 担任华南师范大学特聘教授(part-time)。研究方向主要包括激光雷达(LIDAR, Light Detection And Ranging)、生物医学光学(Biomedical Optics)和气体散射介质吸收光谱(Gas in Scattering Media Absorption Spectroscopy, GASMAS)。著有大量科研论文和获得多项学术专利。最早提出用激光诊断出光动能疗法治疗癌症的课题组之一, 在北欧最早实现了高次谐波的产生, 并在世界上最早实现了人体时间光波透射成像, 带领团队开发了北欧第一个激光雷达车载系统。在多光谱成像和荧光诊断等领域都保持着世界领先水平。Sune Svanberg院士主持瑞典研究基金会的“用激光光谱方法探测物质状态”大型项目(总额6000多万元), 孵化出多个产业化公司。曾获得多项荣誉: 2010年获皇家工程学院大金勋章; 2010年获得瑞典皇家科学院“the Adelskold Medal”勋章和瑞典皇家工程院(Royal Academy of Engineering Sciences)的“the Large Gold Medal”(大金勋章; 最高荣誉)。现任的学术兼职有: 立陶宛科学院和比利时皇家科学院的外籍院士; 第三世界科学院(TWAS)的副研究员; 浙江大学、吉林大学和哈尔滨工业大学名誉教授; 美国物理学会和光学学会的会士。

研究方向:

主要包括:

- (1) 激光雷达(LIDAR, Light Detection And Ranging).
- (2) 生物医学光学(Biomedical Optics).
- (3) 气体散射介质吸收光谱(Gas in Scattering Media Absorption Spectroscopy, GASMAS).

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科研项目（部分）：

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专利情况：

1. Gas correlation lidar (H. Edner, S. Svanberg, L. Unéus, W. Wendt). Swedish patent SE 450 913, European patent EP 190280, WO 8601295
2. Active flash-lamp-based system for measurements of air pollutants (H. Edner, S. Svanberg, L. Unéus, W. Wendt) Swedish patent application SE 8502705
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7. Fluorescence diagnostics of cancer using δ -amino levulinic acid (R. Berg, J. Johansson, K. Svanberg, S. Svanberg), Swedish patent application 9103837-2, International patent application PCT SE92 00879
8. Detectors for separation processes (S. Birnbaum, J. Johansson, P.O. Larsson, A. Miyabayashi, K. Mosbach, S. Nilsson, S. Svanberg, K.G. Wahlund) Swedish patent SE 9201089, European patent 666982, US patent 5627643
9. Colour Night Vision (S. Svanberg, J. Johansson), Swedish Patent SE 468 414, US Patent 5,483,379, European Patent 0584163, Japanese, Korean and Canadian patent pending.
10. Novel X-Ray Spectrometry method based on differential absorption (S. Svanberg, A. Göransson, A. Persson, C. Tillman, C.-G. Wahlström). Swedish Patent 9400848-9
11. Method for multiple fibre interstitial photodynamic therapy (S. Svanberg, Stefan Andersson-Engels, R. Berg, J. Johansson, K. Svanberg) Swedish Patent 503 408
12. Tissue transillumination using interfering diffusive waves (S. Andersson-Engels, R. Berg, Ch. Lindquist, A. Pifferi, S. Svanberg) Swedish Patent Application 1995
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21. Ann Johansson, S. Andersson-Engels, T. Johansson, S. Pålsson, M. Soto Thompson, K. Svanberg and S. Svanberg, Combinatory distributor for radiation, PCT Patent Application 2003

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