

# **CURRICULUM VITAE**

# Dr. Ashraf Elsayed Sayed Ahmed Yehia

**Professor of the Experimental Plasma Physics** 

# **1. The Personal Information**

| The Name        | Ashraf Elsayed Sayed Ahmed Yehia  |  |  |
|-----------------|---|--|--|
| The Nationality | Arab Republic of Egypt  |  |  |
| Date of Birth   | 30 January 1961   |  |  |
| Place of Birth  | Arab Republic of Egypt - Menoufia Governorate - Center of Ashmoun -         |  |  |
|                 | Showshay  |  |  |
| Social Status   | Married   |  |  |
| The Permanent   | Department of Physics, Faculty of Science, Assiut University, Assiut 71516, |  |  |
| Address         | Arab Republic of Egypt  |  |  |
| The Current     | Department of Physics, Faculty of Science, Assiut University, Assiut 71516, |  |  |
| Address         | Arab Republic of Egypt  |  |  |
| Email           | yehia30161@yahoo.com & yehia30161@hotmail.com & yehia30161@aun.edu.eg       |  |  |
| The Websites    | https://www.aun.edu.eg/science/ashraf-el-sayed-sayed-ahmed-yehia            |  |  |
|                 | https://scholar.google.com/citations?user=sQWUcYUAAAAJ&hl=en                |  |  |
|                 | https://www.researchgate.net/profile/Ashraf-Yehia-2                         |  |  |
| The Native      | The Arabic Language   |  |  |
| Language        |   |  |  |
|                 |   |  |  |
| The Other       | The English Language  |  |  |

# 2. The Scientific Qualifications

- Degree of Philosophy Doctor in Science (Physics)

| The Specialization   | The Experimental Plasma Physics and Their Applications                    |  |  |
|----------------------|---|--|--|
| Date of Obtaining    | 31 March 2002   |  |  |
| the Degree           |   |  |  |
| Source of the        | Assiut University at Arab Republic of Egypt in cooperation with Toyohashi |  |  |
| Degree               | University of Technology at Japan (A common supervision).                 |  |  |
|                      | The Scientific Research necessary for obtaining the degree of Philosophy  |  |  |
|                      | Doctor in Science (Physics) were conducted at Toyohashi University of     |  |  |
|                      | Technology - Japan  |  |  |
| University of Grants | Assiut University   |  |  |
| Country of Grants    | Arab Republic of Egypt  |  |  |

# -\_Degree of Master of Science (Physics)

The Specialization The Experimental Plasma Physics

| Date of Obtaining    | 2 December 1991        |
|----------------------|------------------------|
| the Degree           |                        |
| Source of the        | Faculty of Science     |
| Degree               |                        |
| University of Grants | Assiut University      |
| Country of Grants    | Arab Republic of Egypt |

## - Degree of the Bachelor of Science (Physics)

| The Specialization   | Special Physics        |  |  |
|----------------------|------------------------|--|--|
| Date of Obtaining    | May 1983               |  |  |
| the Degree           |                        |  |  |
| Source of the        | Faculty of Science     |  |  |
| Degree               |                        |  |  |
| University of Grants | Menoufia University    |  |  |
| Country of Grants    | Arab Republic of Egypt |  |  |
| The Rating           | Very Good (81.5 %)     |  |  |

# 3. Scientific Experiences and Administrative Positions

# • Inside Arab Republic of Egypt

#### - Professor of the Experimental Plasma Physics

| Place of Working | Arab Republic of Egypt - Assiut University - Faculty of Science - Department |  |  |  |
|------------------|--|--|--|--|
|                  | of Physics   |  |  |  |
| Joining Date     | Starting from 18/1/2018  |  |  |  |

## - Assistant Professor of the Experimental Plasma Physics

| Place of Working | Arab Republic of Egypt - Assiut University - Faculty of Science - Department |  |  |
|------------------|--|--|--|
|                  | of Physics   |  |  |
| Joining Date     | Starting from 31/1/2010 to 17/1/ 2018  |  |  |

#### - Lecturer (Faculty Member) - The Experimental Plasma Physics

| Place of Working | Arab Republic of Egypt - Assiut University - Faculty of Science - Department |  |  |
|------------------|--|--|--|
|                  | of Physics   |  |  |
| Joining Date     | Starting from 28/4/2002 to 30/1/2010   |  |  |

#### - Assistant Lecturer - The Experimental Plasma Physics

| Place of Working | Arab Republic of Egypt - Assiut University - Faculty of Science - Department |  |  |
|------------------|--|--|--|
|                  | of Physics   |  |  |
| Joining Date     | Starting from 11/1/1992 to 27/4/2002   |  |  |

## - Demonstrator

| 201101101101     |  |  |  |
|------------------|--|--|--|
| Place of Working | Arab Republic of Egypt - Assiut University - Faculty of Science - Department |  |  |
|                  | of Physics   |  |  |
| Joining Date     | Starting from 27/12/1984 to 10/1/1992  |  |  |
|                  |  |  |  |

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## Inside Kingdom of Saudi Arabia

#### - Associate Professor

| Place of Working | Kingdom of Saudi Arabia - Prince Sattam bin Abdulaziz University - College |  |  |
|------------------|--|--|--|
|                  | of Science and Humanities in Al-kharj - Department of Physics              |  |  |
| Joining Date     | Starting from 25/9/1431 H up to 24/11/1441 H.                              |  |  |

#### - Assistant Professor

| Place of Working | Kingdom of Saudi Arabia - Prince Sattam bin Abdulaziz University - College |  |  |  |
|------------------|--|--|--|--|
|                  | of Science and Humanities in Al-kharj - Department of Physics              |  |  |  |
| Joining Date     | Starting from 2/10/1429 H to 24/9/1431 H                                   |  |  |  |

### 4. Scientific and Professional Memberships

- Member of the Association of Egyptian Scientists starting from 27/12/1984 up to now.

### 5. Membership of the committees

- Inside Arab Republic of Egypt
- 1- Member in the board of Department of Physics Faculty of Science Assiut University Arab Republic of Egypt for the academic years (2002/2003, 2005/2006, 2007/2008), and a permanent member starting from 31/1/2010 up to now.
- 2- Chairman of the Examiners Committee in Department of Physics Faculty of Science Assiut University - Arab Republic of Egypt for five years starting from the academic year 2003/2004 up to the academic year 2007/2008.
- 3- Member of the Procurement Committee in Department of Physics Faculty of Science Assiut University - Arab Republic of Egypt in the period from 2002 to 2008.
- Inside Kingdom of Saudi Arabia
- 1- Member in the board of Department of Physics College of Science and Humanities in Al-kharj -Prince Sattam bin Abdulaziz University - Kingdom of Saudi Arabia starting from 2/10/1429 H up to 24/11/1441 H.
- 2- Member of several internal committees in Department of Physics College of Science and Humanities in Al-kharj - Prince Sattam bin Abdulaziz University - Kingdom of Saudi Arabia starting from 2/10/1429 H up to 24/11/1441 H.

### 6. Scientific Awards, Research Grants, and Certificates of Appreciation

- 1- A scholarship to Toyohashi University of Technology at Japan in the period from 9/6/1998 to 10/6/2000 on expense of the Egyptian government to conduct the scientific research necessary for obtaining the degree of Doctor of Philosophy in Science (Physics).
- 2- Three financial awards from Administration of Higher Studies and Research at Assiut University -Arab Republic of Egypt for publishing scientific articles in magazines of high impact factor in physics through the years 2008, 2010 and 2011.
- 3- Research excellence award from Deanship of the Scientific Research at Prince Sattam bin Abdulaziz University in 2017- Kingdom of Saudi Arabia.
- 4- Four research projects supported from Deanship of the Scientific Research at Prince Sattam bin Abdulaziz University - Kingdom of Saudi Arabia in the period from 2012 to 2017.

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5- Many of the appreciation certificates from Department of Physics and College of Science and Humanities in Al-kharj - Prince Sattam bin Abdulaziz University - Kingdom of Saudi Arabia - in the period from 2008 to 2017.

## 7. Scientific Visits and Public Lectures and Community Service

- 1- The participation in developing the research laboratory of plasma physics and the electric discharge at Department of Physics Faculty of Science Assiut University Arab Republic of Egypt.
- 2- The participation in preparing the laboratory of electromagnetism Department of Physics College of Science and Humanities in Al-kharj - Prince Sattam bin Abdulaziz University - Kingdom of Saudi Arabia.
- 3- Lectures in the electromagnetism and the thermodynamics for the teachers of physics in the secondary schools at Al-Kharj Governorate Kingdom of Saudi Arabia.

## 8. Experiences of Teaching and Supervision of the Theses

8.1. Teaching Experiences:

#### • The courses that were taught to undergraduate students

|        | Inside Arab Republic of Egypt in the period from 28/4/2002 to 1/10/2008 |                        |                   |                 |
|--------|---|------------------------|-------------------|-----------------|
| Number | Name of the course  | The College            | The University    | The<br>Languish |
| 1      | Material properties - Heat and  | Faculty of Science and | Assiut University | English         |
|        | Thermodynamics - Sound  | Faculty of Education   |                   |                 |
| 2      | Biophysics  | Faculty of Science and | Assiut University | English         |
|        |   | Faculty of Education   |                   |                 |
| 3      | Atomic Physics  | Faculty of Science     | Assiut University | English         |
| 4      | Nuclear physics and radiation   | Faculty of Science and | Assiut University | English         |
|        |   | Faculty of Education   |                   |                 |
| 5      | Natural light and geometric   | Faculty of Science and | Assiut University | English         |
|        | optics  | Faculty of Education   |                   |                 |
| 6      | Modern Physics  | Faculty of Science     | Assiut University | English         |
| 7      | Vibrations and Waves  | Faculty of Science     | Assiut University | English         |
| 8      | Electromagnetism  | Faculty of Science and | Assiut University | English         |
|        |   | Faculty of Education   |                   |                 |
| 9      | Electrodynamics   | Faculty of Science and | Assiut University | English         |
|        |   | Faculty of Education   |                   |                 |
| 10     | Plasma Physics  | Faculty of Education   | Assiut University | English         |

| Inside Kingdom of Saudi Arabia starting from 2/10/2008 up to 17/6/2020 |                                 |                        |                      |                 |  |  |
|--|---------------------------------|------------------------|----------------------|-----------------|--|--|
| Number   | Name of the course              | The College            | The University       | The<br>Languish |  |  |
| 1  | General Physics for students of | Preparatory year       | Prince Sattam bin    | English         |  |  |
|  | Health Sciences (PHYS 106)      | students               | Abdulaziz University |                 |  |  |
| 2  | General Physics                 | Preparatory year       | Prince Sattam bin    | English         |  |  |
|  | (PHYS 1010)                     | students               | Abdulaziz University |                 |  |  |
| 3  | General Physics                 | College of Engineering | Prince Sattam bin    | English         |  |  |
|  | (PHYS 1040)                     |                        | Abdulaziz University |                 |  |  |
| 4  | Optics and Heat                 | College of Engineering | Prince Sattam bin    | English         |  |  |
|  | (PHYS 1100)                     | and Computer Science   | Abdulaziz University |                 |  |  |
| 5  | Electrostatics and Magnetism    | College of Engineering | Prince Sattam bin    | English         |  |  |
|  | (PHYS 1110)                     | and Computer Science   | Abdulaziz University |                 |  |  |

| 6  | General Physics                 | College of Science and | Prince Sattam bin    | English |
|----|---------------------------------|------------------------|----------------------|---------|
|    | (PHYS 1080)                     | Humanitarian Studies   | Abdulaziz University |         |
| 7  | General Physics for students of | College of Science and | Prince Sattam bin    | English |
|    | mathematics (PHYS 2180)         | Humanitarian Studies   | Abdulaziz University |         |
| 8  | Electromagnetism 1              | College of Science and | Prince Sattam bin    | English |
|    | (PHYS 2210)                     | Humanitarian Studies   | Abdulaziz University |         |
| 9  | General Physics 2               | College of Science and | Prince Sattam bin    | English |
|    | (PHYS 2310)                     | Humanitarian Studies   | Abdulaziz University |         |
| 10 | Thermodynamics                  | College of Science and | Prince Sattam bin    | English |
|    | (PHYS 2410)                     | Humanitarian Studies   | Abdulaziz University |         |
| 12 | Electromagnetism 2              | College of Science and | Prince Sattam bin    | English |
|    | (PHYS 2430)                     | Humanitarian Studies   | Abdulaziz University |         |
| 13 | Lab of Electromagnetism         | College of Science and | Prince Sattam bin    | English |
|    | (PHYS 3920)                     | Humanitarian Studies   | Abdulaziz University |         |

### • The Graduation Projects

- 1- Supervising on the graduation projects for twenty-eight students at faculty of Science and faculty of Computer and Information Sciences Assiut University Arab Republic of Egypt in the period from beginning of the academic year 2002/2003 up to the end of the academic year 2007/2008.
- 2- Supervising on the graduation projects for 30 students at Department of Physics College of Science and Humanities in Al-kharj – Prince Sattam bin Abdulaziz University - Kingdom of Saudi Arabia in the period from 2/10/1429 H until the end of the academic year 1437/1438 H.

## • The courses that were taught to higher graduate students

| Number | Name of the course | The College        | The University    | The<br>Languish |
|--------|--------------------|--------------------|-------------------|-----------------|
| 1      | Plasma Physics     | Faculty of Science | Assiut University | English         |

# 8.2. The supervision on the scientific theses

- 1- Member of the supervision committee on a PhD Thesis entitled (Applications of the back-projection technique for 3-dimensional examination of optical phase object using laser speckles), Department of Physics Faculty of Science Assiut University, Arab Republic of Egypt in the period from 18/6/2006 to 31/1/2010.
- 2- Member of the supervision committee on a Master Thesis entitled (Characteristics of the corona discharge in different gases with and without external magnetic fields), Department of Physics Faculty of Science Assiut University, Arab Republic of Egypt in the period from 11/1/2005 to 23/9/2008.

# 9. Attendance and Participation in Conferences and Seminars

- Scientific sessions:
- A training program entitled (The Strategic Planning) Faculty and Leadership Development Center at Assiut University on Sunday and Monday 6 and 7 August 2017 from 4 to 10 pm.
- A training program entitled (System of the credit hours) Faculty and Leadership Development Center at Assiut University on Tuesday and Wednesday 1 and 2 August 2017 from 9 am to 3 pm.
- A training program entitled (Behaviors of the profession) Faculty and Leadership Development Center at Assiut University on Tuesday and Wednesday 1 and 2 August 2017 from 4 to 10 pm.

- A training program entitled (Ethics of the scientific research) Faculty and Leadership Development Center at Assiut University on Sunday and Monday 30 and 31 July 2017 from 9 am to 3 pm.
- A training program entitled (Funding of the scientific research and the grants) Faculty and Leadership Development Center at Assiut University on Sunday and Monday 30 and 31 July 2017 from 4 to 10 pm.
- A training program entitled (Quality standards in the teaching process) Faculty and Leadership Development Center at Assiut University on Monday and Tuesday 24 and 25 July 2017 from 4 10 pm.
- A workshop entitled (Academic advising and its role in the educational process) College of Science and Humanities in Al-kharj - Prince Sattam bin Abdulaziz University on Monday 18/12/12437 H (19/9/2016) at 11:30 Am.
- General lecture in thermodynamics for the teachers of the secondary schools at Al Kharj Governorate, College of Science and Humanities in Al-kharj - Prince Sattam bin Abdulaziz University on Monday 11/7/1437 H (18/4/2016), 10-12 Am.
- A workshop entitled (Skills of Management and Leadership), College of Science and Humanities in Al-kharj Prince Sattam bin Abdulaziz University on Wednesday 20/2/1437 H (2/12/2015) at 12-1 Pm.
- A workshop entitled (Academic Advising and its role in the educational process) College of Science and Humanities in Al-kharj - Prince Sattam bin Abdulaziz University on Monday 6/1/12437 H (19/10/2015) at 11 Am.
- A workshop entitled (The second international workshop for the electronic learning -Transformation from the traditional electronic learning to the compact learning), Prince Sattam bin Abdulaziz University on Thursday 3/8/1436 H (21/5/2015).
- A workshop entitled (Development of digital content for the courses by using the blackboard), Prince Sattam bin Abdulaziz University on Monday 17/6/1436 H (6/4/2015).
- A workshop entitled (King Abdulaziz City and supporting the scientific research) and (Ethics and Secretariat in the Scientific Research), College of Science and Humanities in Al-kharj Salman bin Abdulaziz University on Wednesday 29/4/1436 H (18/2/2015) from 9 Am to 2 Pm.
- A Meeting for administration of College of Science and Humanities in Al-kharj with the faculty members on Sunday, 12/11/1435 H at 12-1 pm.
- A public lecture entitled (Guidance for young people), College of Science and Humanities in Al-kharj on Sunday 8/5/1435 H at 10:30 Am.
- A Workshop entitled (Funding the research projects from the idea to the acceptance), Salman bin Abdulaziz University on Tuesday 4/7/1434 H (14/5/2013).
- A training program entitled (Evaluation methods and the test matrix) within Calendar developmental program of Salman bin Abdulaziz University on Monday 19/6/1434 H (29/4/2013).
- A workshop entitled (Elsevier digital library), The public library of Salman bin Abdulaziz University on Monday 1/3/1434 H (13/1/2013).
- A workshop entitled (Quality assurance and institutional and programmatic calendar) within the developmental program for Salman bin Abdulaziz University on the period 21-22/4/2012.
- A workshop entitled (The quartet analysis SWOT of the Strategic Plan of College of Science and Humanities in Al-kharj - Salman bin Abdulaziz University on Saturday, 27/5/2011 m (25/6/1432 H) at

7 pm.

- A workshop entitled (Launching of the Strategic Plan for College of Science and Humanities in Alkharj), Salman bin Abdulaziz University on 15/5/.2011.
- A workshop entitled (The strategic plan of Salman bin Abdulaziz University), College of Science and Humanities in Al-kharj on 22/4/2011.
- A seminar entitled (The scientific miracles in the Koran and the Sunnah), Salman bin Abdul Aziz University on 22/2/2011.
- A training program entitled (Basics and standards of the quality in the high education), project of the quality at Salman bin Abdulaziz University on Monday, 16/10/2010 from 5 to 10:30 pm.
- A training program entitled (System of the credit hour), Faculty and Leadership Development Center at Assiut University on the period from 22 to 24 March 2008.
- A training program entitled (The teaching for large numbers and mini teaching), Faculty and Leadership Development Center at Assiut University on the period from 28 to 30 April 2007.
- A training program entitled (Preparing and writing the scientific articles and their publishing internationally), Faculty and Leadership Development Center at Assiut University on the period from 2 to 4 April 2007.
- A training program entitled (Use of technology in the teaching), Faculty and Leadership Development Center at Assiut University on the period from 16 to 18 December 2006.
- A training program entitled (Decision-making and the problems solving), Faculty and Leadership Development Center at Assiut University on the period from 30 to 2 June 2005.
- A training program entitled (Teaching for Learning), Faculty and Leadership Development Center at Assiut University on the period from 12 to 13 October 2004.
- A course entitled (Origins of the public and the private teaching) at Department of Training Faculty of Education Assiut University on the period from 31 March to 11April, 2001.
- Conferences and seminars:
- 1- Member of the Organizing Committee for a workshop entitled (Materials Science and Medical Radiation Physics) organized by Faculty of Science - Assiut University, Arab Republic of Egypt on the period 20 to 22 December 2003.
- 2- An International Conference entitled (Middle East Power System Conference) held at Assiut University, Assiut, Egypt from 12 to 13 January 1989.

#### **10. Research Interests**

- 1- The physical mechanism and the electrical characteristics of the non-thermal plasmas generated by using both the corona discharges and the dielectric barrier discharges (DBDs) under different operating conditions.
- 2- The industrial applications of the non-thermal plasmas generated by using both the corona discharges and the dielectric barrier discharges (DBDs), especially the ozone generators and the electrostatic precipitators as well as removing the different gaseous pollutants from the environment.

# **11. Scientific Production and Publications**

- [1] Ashraf Yehia, "The thermal energy loss in the dielectric barrier discharge plasma", International Journal of Plasma Environmental Science and Technology, Volume 18, Number 3, Page e03002, 2024. The Institute of Electrostatics Japan http://ijpest.com/Contents/18/3/e03002.html
- [2] Ashraf Yehia, "Optimum operating conditions for the ozone generation in the dielectric barrier discharges", International Journal of Plasma Environmental Science and Technology, Volume 25, Number 3. Page e03007, 2021. *The Institute of Electrostatics Japan* http://ijpest.com/Contents/15/3/e03007.html
- [3] Ashraf Yehia, "Characteristics of the dielectric barrier corona discharges", AIP Advances, Volume
   9, Page 045214 (1 10), 2019. *The American Institute of Physics* (AIP) https://aip.scitation.org/doi/10.1063/1.5085675
- [4] Essam Abdel-Fattah, Ashraf Yehia, Marian Bazavan, and Tatsuo Ishijima, "Optical emission and surface characterization of stainless steel treated by pulsed microwave- atmospheric helium plasma jet", The European Physical Journal D, Volume 71, Page 178 (1 – 9), 2017. https://epjd.epj.org/articles/epjd/abs/2017/07/d170044/d170044.html
- [5] Ashraf Yehia, "The electrical characteristics of the dielectric barrier discharges", Physics of Plasmas, Volume 23, Page 063520 (1 - 11), 2016. *The American Institute of Physics* (AIP) https://aip.scitation.org/doi/abs/10.1063/1.4954300
- [6] Ashraf Yehia, E. Abdel-Fattah and Akira Mizuno, "Positive direct current corona discharges in single wire-duct electrostatic precipitators", AIP Advances, Volume 6, Page 055213 (1 15), 2016. *The American Institute of Physics* (AIP) https://aip.scitation.org/doi/full/10.1063/1.4951693
- [7] Ashraf Yehia, "Consumption of the electric power inside silent discharge reactors", Physics of Plasmas, Volume 22, Page 013506 (1 - 8), 2015. *The American Institute of Physics* (AIP) https://aip.scitation.org/doi/10.1063/1.4905708
- [8] Ashraf Yehia and Akira Mizuno, "Ozone generation by negative direct current corona discharges in dry air fed coaxial wire-cylinder reactors", Journal of Applied Physics, Volume 113, Page 183301 (1 - 10), 2013. *The American Institute of Physics* (AIP) https://aip.scitation.org/doi/10.1063/1.4804065
- [9] Ashraf Yehia, "Assessment of ozone generation in dry air fed silent discharge reactors", Physics of Plasmas, Volume 19, Page 023503 (1 - 9), 2012. *The American Institute of Physics* (AIP). https://aip.scitation.org/doi/10.1063/1.3682983

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[10] Ashraf Yehia and Akira Mizuno, "Expectation of ozone generation in alternating current corona discharges", Physics of Plasmas, Volume 19, Page 033513 (1 - 6), 2012. *The American Institute of Physics* (AIP)
 https://ain.scitation.org/doi/abs/10.1062/1.2605200

https://aip.scitation.org/doi/abs/10.1063/1.3695390

- [11] Reda Ahmed El-Koramy, Ashraf Yehia and Mohamed Omer, "Development of ac corona discharge modes at atmospheric pressure", Physics of Plasmas, Volume 18, Page 023502 (1 10), 2011. *The American Institute of Physics* (AIP) https://aip.scitation.org/doi/10.1063/1.3553455
- [12] Reda Ahmed El-Koramy, Ashraf Yehia and Mohamed Omer, "Effect of configuration and dimensions of reactor electrodes on electrical and optical corona discharge characteristics", Physics of Plasmas, Volume 17, Page 053501 (1 9), 2010. *The American Institute of Physics* (AIP)

https://aip.scitation.org/doi/10.1063/1.3389188

- [13] Ashraf Yehia, "Operating regimes of corona and silent discharges in coaxial cylindrical reactors", Journal of Applied Physics, Volume 103, Page 073301 (1 - 7), 2008. The American Institute of Physics (AIP) https://aip.scitation.org/doi/10.1063/1.2901058
- [14] Ashraf Yehia, "Assessment of the ionization region in the positive dc coronas", International Journal of Plasma Environmental Science and Technology, Volume 2, Number 2, Page 82 – 88, October 2008.
  http://iinect.com/Contents/02/2/PDE/02.02.082.pdf

http://ijpest.com/Contents/02/2/PDF/02-02-082.pdf

- [15] Ashraf Yehia and Akira Mizuno, "Suppression of the ozone generation in the positive and negative dc corona discharges", International Journal of Plasma Environmental Science and Technology, Volume 2, Number 1, Page 44 – 49, March 2008. http://www.iesj.org/content/files/pdf/IJPEST\_Vol2\_No1\_05\_pp44-49.pdf
- [16] Ashraf Yehia, "Calculation of ozone generation by positive dc corona discharge in coaxial wire cylinder reactors", Journal of Applied Physics, Volume 101, Number 2, Page 023306 (1 5), 2007. The American Institute of Physics (AIP) https://aip.scitation.org/doi/10.1063/1.2426927
- [17] Ashraf Yehia and Akira Mizuno, "Silver discharge electrode for suppression of ozone generation in positive DC corona", Conference Record of the IEEE INDUSTRY APPLICATIONS CONFERENCE, Volume 40; Part 3, Page 1828 - 1832, 2005. https://ieeexplore.ieee.org/document/1518694
- [18] Ashraf Yehia and Akira Mizuno, "Calculation of the electrical power dissipated in silent discharge reactors", Journal of Applied Physics, Volume 98, Page 043305 (1 - 7), 2005. The American

Institute of Physics (AIP) https://aip.scitation.org/doi/10.1063/1.2009819

[19] Ashraf Yehia, A. Mizuno and M. A. M. El-Osealy, "Calculation of ozone generation in ac corona discharge reactor", Japanese Journal of Applied Physics, Volume 43, Number 8A, Page 5558 – 5561, 2004.

https://iopscience.iop.org/article/10.1143/JJAP.43.5558

- [20] A. Hashem, M. Abdel-Salam, A. Mizuno, A. Yehia, A. Turky and A. Gabr, "Optimum operating conditions for ozone generation in ac corona and ac silent discharge reactors", Journal of Institute of Electrostatics Japan, Volume 27, Number 3, Page 129 - 134, 2003.
- [21] M. Abdel-Salam, A. Hashem, A. Yehia, A. Mizuno, A. Turky and A. Gabr, "Characteristics of corona and silent discharges as influenced by geometry of the discharge reactor", J. Phys. D: Appl. Phys., Volume 36, Page 252 - 260, 2003. https://iopscience.iop.org/article/10.1088/0022-3727/36/3/306
- [22] E. M. El-Maghraby, A Sedky, and A Yehia "The Effect of Zn-Substitution on the Anomalous Resistance Behavior of La<sub>1-x</sub>Ca<sub>x</sub>Mn<sub>1-y</sub>Zn<sub>y</sub>O<sub>3</sub> Compounds", Journal of Low Temperature Physics, Volume 133 (5-6), Page 387-398, 2003. https://link.springer.com/article/10.1023/A:1026299825795
- [23] A. Hashem, M. Abdel-Salam, A. Yehia, A. Mizuno, A. Turky and A. Gabr, "Optimum operating conditions for ozone generation in dc corona discharge reactors", XIV International Conference on Gas Discharges and their Applications, 2<sup>nd</sup> to 6<sup>th</sup> September, Liverpool, England, Volume 2, Page 362 - 366, 2002.
- [24] A. Yehia, A. Mizuno and K. Takashima, "On the characteristics of the corona discharge in a wireduct reactor", J. Phys. D: Appl. Phys., Volume 33, Page 2807 - 2814, 2000. https://iopscience.iop.org/article/10.1088/0022-3727/33/21/321/meta
- [25] A. Yehia, A. Mizuno and K. Takashima, "Corona characteristics as influenced by magnitude and direction of the air flow rate in a wire-duct reactor", Industry Applications Conference, 2000.
   Conference Record of the 2000 IEEE, 8-12 October, Rome, Italy, Volume 2, Page 714 718, 2000.

https://ieeexplore.ieee.org/document/881908

- [26] A. Yehia, M. Abdel-Salam and A. Mizuno, "On assessment of ozone generation in dc coronas", J. Phys. D: Appl. Phys., Volume 33, Page 831 - 835, 2000. https://iopscience.iop.org/article/10.1088/0022-3727/33/7/312/pdf
- [27] M. Abdel-Salam, M. T. El-Mohandes, A. A. Turky and A. Yehia, "On the characteristics of corona from helical wires", Middle East Power System Conference, 12 and 13 January at Assiut

University, Assiut, Egypt, Volume 1, Page 508 - 512, 1989.

[28] M. Abdel-Salam, M. T. El-Mohandes, A. A. Turky and A. Yehia, "Analysis of corona from helical wires", IEEE - IAS Conference Record, Page 1670 - 1676, Pittsburgh, USA, 1988. https://ieeexplore.ieee.org/document/25283