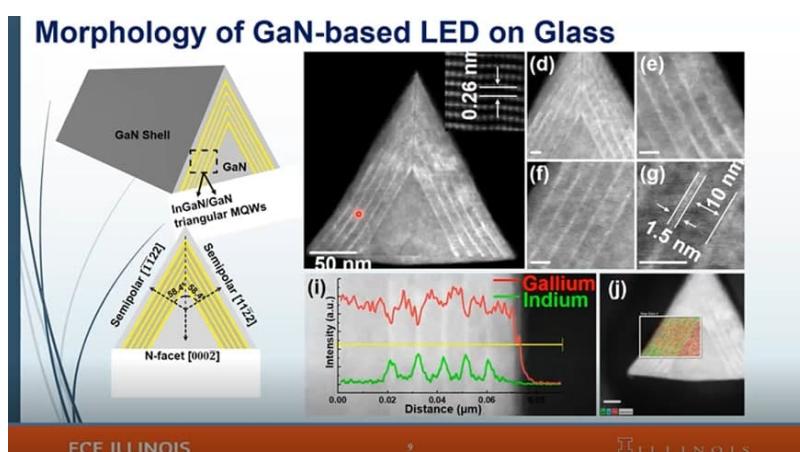


Illinoys universiteti (AQSh) tadqiqotchisi ishtirokida onlayn seminar

O'zbekiston Fanlar akademiyasi Fizika-texnika institutining taklifiga binaon AQShning Illinoys universitetining tadqiqotchisi doktor Muhammad Ali Johar (Muhammad Ali Johar) ishtirokida onlayn ilmiy-seminar o'tkazildi. Unda doktor Muhammad Ali Johar "Kubsimon GaN - samaradorligi pasaymaydigan yashil svetodiodlar olish uchun potentsial nomzod" ("Droop-Free Green LED: Cubic GaN a Potential Candidate") mavzusida ma'ruza qildi. Seminarda Institut ilmiy xodimlari, yosh olimlar va FA boshqa tashkilotlari vakillari qatnashdilar.



History of "Micro and Nanotechnology Laboratory, U of Illinois"



John Bardeen (1951)

He brought semiconductor research to Illinois

Inventions:

- Semiconductor Transistor (Nobel 1956)
- Theory of superconductivity (Nobel 1972)



Nick Holonyak (1st graduate student of John Bardeen)

He started solid state lighting research

Inventions:

- The concept of ternary semiconductors (alloying III-V semiconductors to tune bandgap)
- Invention of first visible red LED and laser diode

Ushbu seminarda Ali Johar kvantlangan Shtark effekti ta'sirini so'ndirish maqsadida, monokristalli kubsimon galliy nitridini qo'llash asosida samaradorligi keskin pasaymaydigan yashil svetodiodlarni ishlab chiqish sohasidagi o'zining ilmiy natijalarini taqdim etdi. Institut tadqiqotchilarida kremlniy hamda kvarts tagliklarida kubsimon galliy nitridini o'stirish bo'yicha amerikalik olim qo'llagan uslub katta qiziqish uyg'otdi. Taqdimotdan so'ng Ali Johar seminar ishtirokchilarining savollarga javob berib, qiziqish bildirgan yosh olimlarni AQShning Illinoys Universitetidagi o'zi ishlayotgan va boshqa laboratoriyalarda ilmiy amaliyot o'tashga taklif qildi.

Ma'lumot o'rnda, Doktor Ali Johar hozirda Illinoys shtatidagi Illinoys universitetining mashhur Nik Xolonyak nomidagi mikro- va nanotexnologiyalar laboratoriyasining ilmiy xodimidir. Bu laboratoriyada uzoq yillar davomida (1951-1991-yillar) umrining oxirigacha fizika sohasida ikki karra Nobel mukofoti laureati professor Djon Bardin ishlagan. Birinchi Nobel mukofotini u 1956-yil tranzistor uchun, ikkinchisini esa 1972-yilda oddiy o'tkazuvchanlarning mukammal nazariyasini yaratgani uchun qo'lga kiritgan. Ali Johar tadqiqotlar olib borayotgan mashhur laboratoriyada 1962-yil Nik Xolonyak tomonidan jahonda birinchi ko'rinvuvchi sohadagi lazer hamda svetodiod yaratilgan. Nik Xolonyak professor Djon Bardinning Illinoys universitetidagi birinchi aspiranti bo'lgan.