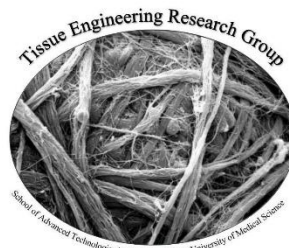




انجمن علمی دانشجویی مهندسی بافت

دانشگاه علوم پزشکی اصفهان

دانشکده فناوری‌های نوین





معرفی هسته پژوهشی مهندسی بافت:

هسته مهندسی بافت از سال ۱۳۸۵ در دانشکده علوم پزشکی اصفهان فعالیت خود را با مدیریت و هدایت دکتر سعید کرباسی آغاز کرد. دانشجویان از حوزه های مختلف مثل مهندسی پزشکی، مهندسی شیمی، مهندسی مواد و... در این هسته مشغول به پژوهش هستند. جلسات هسته به صورت ماهیانه برگزار می شود. حوزه های مختلف پژوهشی در این هسته عبارتند از:

مهندسی بافت استخوان

مهندسی بافت غضروف

مهندسی بافت تاندون لیگامنت

مهندسی بافت عصب

مهندسی بافت پوست

مهندسی بافت دندان



فعالیت های انجام شده در حیطه مهندسی بافت استخوان

الف) روش الکتروریسی:

- PHB+n.BG
- PHB+n.diopside
- PHB+n.HA
- PHB+Chitosan+n.TCP
- PHB+CNT
- PHB+Chitosan+n.Al₂O₃
- PHB+Keratin

ب) روش *Salt leaching*

PHB+n.BG

PHB+n.HA

پ) روش *Foamcasting – replication method*

n.BG/PHB(coated)

n.HA/PHB(coated)

(n.HA+n.TiO₂) /PHB(coated)

(n.BG+n.TiO₂) /PHB(coated)

(n.HA+n.TiO₂) / (PHB+n.BG)(coated)

(n.BG+n.TiO₂) / (PHB+n.HA)(coated)

n.TCP/PHB(coated)

(n.BG+TiO₂) / (PHB+Chitosan+CNT)(coated)



فعالیت های انجام شده در حیطة مهندسی بافت غضروف

الف) روش الکتروریسی:

PHB+Chitosan(random)

PHB+Chitosan+CNT

PHB+Chitosan+Al₂O₃

PHB/Glucosamine

PHB+Chitosan+Hyaluronic

ب) روش *Salt leaching*

PHB/Glucosamine

پ) روش *Hybrid scaffold with silk fiber*

PHB+Chitosan+SF

PHB+Chitosan+SF+CNT



فعالیت های انجام شده در حیطه مهندسی بافت دندان

روش الکتروریسی:

PHB+Chitosan+n.BG

فعالیت های انجام شده در حیطه مهندسی بافت عصب

روش الکتروریسی:

PHB+Chitosan(aligned)



فعالیت های انجام شده در حیطة مهندسی بافت تاندون لیگامنت

روش *Hybrid scaffold with silk fiber*

PHB+silk fibroin

فعالیت های انجام شده در حیطة مهندسی بافت پوست

روش الکتروریسی:

PVDF/PHB

PGS(core)/PHB(shell)

برخی از دانشجویان فعال در هسته مهندسی بافت

| نام و نام خانوادگی | زمان فعالیت در هسته (سال) | موقعیت فعلی |
|----------------------|---------------------------|---|
| اشکان حیدرخان تهرانی | ۸۸-۹۰ | دانشجوی دکترا مهندسی بافت، دانشگاه سیدنی استرالیا |
| هادی حاج علی | ۸۸-۹۰ | دانشجوی دکترا، دانشگاه MIT |
| محمدرضا فروغی | ۸۵-۹۴ | دانشجوی دکترا، دانشکده دندانپزشکی علوم پزشکی اصفهان |
| الهام نقاش زرگر | ۹۰-۹۴ | فارغ التحصیل دکترای مهندسی نساجی |
| داوود صادقی | ۹۱-۹۳ | دانشجوی دکترا مهندسی پزشکی، دانشگاه صنعتی امیرکبیر |
| فرنوش فکرت | ۹۲-۹۴ | دانشجوی دکترا مهندسی پزشکی، پژوهشکده مواد و انرژی |
| بابک پورملاعباسی | ۹۲-۹۴ | دانشجوی مهندسی بافت، دانشگاه علوم پزشکی تهران |
| ساناز سلیمانی | ۹۲-۹۴ | دانشجوی دکترا مهندسی بافت، دانشگاه آزاد نجف آباد |
| عباس سعادت | ۸۷-۹۱ | عضو هیات علمی دانشگاه آزاد واحد مجلسی |

و...

آقایان: رادمهر، زارعی، عباسی، میرموسوی، نیکبخت و یکرنگ.
 خانمها: آبرون، ابراهیمی، اکبرپور، امینی، بهرمندی، دهقان، رفیعی، زاده
 نجار، شاهی، شاه علی، صدیقی، علیزاده، علیخانی فرد، کریمی، کیخواهی و
 منتظری.



ارائه دستاوردهای انجمن به صورت مقاله و چاپ در نشریات معتبر

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2. Karbasi, S. ,et al., "Comparison of Acellular and Cellular Bioactivity of Poly3-hydroxybutyrate/hydroxyapatite Nanocomposite and Poly3-hydroxybutyrate Scaffolds.", *Biotechnology and Bioprocess Engineering*, 2013.
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