

Fig. 1A: SEVEN MEMBER PEPTIDES WITH ASPARTIC ACID HEAD GROUP

SEQID No.	Peptide	Peptide sequence	Observation
1	Ac-LD ₇ (L)	Ac-LIVAGDD-COOH (L)	Hydrogelation

Fig. 1B: SIX MEMBER PEPTIDES WITH ASPARTIC ACID HEAD GROUP

SEQID No.	Peptide	Peptide sequence	Observation
2	Ac-LD ₆ (L Form)	Ac-LIVAGD-COOH (L)	Hydrogelation
3	Ac-LD ₆ (D Form)	Ac-LIVAGD-COOH (D)	Hydrogelation
4	Ac-AD ₆ (L)	Ac-AIVAGD-COOH (L)	Hydrogelation
5	Ac-AD ₆ (D)	Ac-AIVAGD-COOH (D)	Hydrogelation
6	Ac-ID ₆ (L)	Ac-ILVAGD-COOH (L)	Hydrogelation
7	Ac-ID ₆ (D)	Ac-ILVAGD-COOH (D)	Hydrogelation
8	Ac-LD ₆₋₁ (L Form)	Ac-LAVAGD-COOH (L)	Hydrogelation
9	Ac-LD ₆₋₂ (L Form)	Ac-LIVAAD-COOH (L)	Hydrogelation

Fig. 1C: SIX MEMBER PEPTIDES WITH SERINE HEAD GROUP

SEQID No.	Peptide	Peptide sequence	Observation
10	Ac-LS ₆ (L)	Ac-LIVAGS-COOH (L)	Hydrogelation
11	Ac-LS ₆ (D)	Ac-LIVAGS-COOH (D)	Hydrogelation
12	Ac-AS ₆ (L)	Ac-AIVAGS-COOH (L)	Hydrogelation
13	Ac-IS ₆ (L)	Ac-ILVAGS-COOH (L)	Hydrogelation

Fig. 1D: SIX MEMBER PEPTIDES WITH THREONINE HEAD GROUP

SEQID No.	Peptide	Peptide sequence	Observation
14	Ac-LT ₆ (L)	Ac-LIVAGT-COOH (L)	Hydrogelation
15	Ac-AT ₆ (L)	Ac-AIVAGT-COOH (L)	Hydrogelation

Fig. 1

Fig. 1E: SEVEN MEMBER PEPTIDES WITH GLUTAMIC ACID HEAD GROUP

SEQID No.	Peptide	Peptide sequence	Observation
16	Ac-LE ₇ (L)	Ac-LIVAGEE-COOH (L)	Hydrogelation

Fig. 1F: SIX MEMBER PEPTIDES WITH GLUTAMIC ACID HEAD GROUP

SEQID No.	Peptide	Peptide sequence	Observation
17	Ac-LE ₆ (L Form)	Ac-LIVAGE-COOH (L)	Hydrogelation
18	Ac-LE ₆ (D Form)	Ac-LIVAGE-COOH (D)	Hydrogelation

Fig. 1G: SIX MEMBER PEPTIDES WITH LYSINE HEAD GROUP

SEQID No.	Peptide	Peptide sequence	Observation
19	Ac-LK ₆ (L Form)	Ac-LIVAGK-CONH ₂ (L)	Hydrogelation

Fig. 1H: FIVE MEMBER PEPTIDES WITH ASPARTIC ACID HEAD GROUP

SEQID No.	Peptide	Peptide sequence	Observation
20	Ac-LD ₅₋₁ (L)	Ac-LIVAD-COOH (L)	Hydrogelation
21	Ac-LD ₅₋₂ (L)	Ac-LIVGD-COOH (L)	Hydrogelation

Fig. 1I: FOUR MEMBER PEPTIDES WITH ASPARTIC ACID HEAD GROUP

SEQID No.	Peptide	Peptide sequence	Observation
22	Ac-ID ₄ (L)	Ac-IVAD-COOH (L)	Hydrogelation
23	Ac-ID ₄ (D)	Ac-IVAD-COOH (D)	Hydrogelation

Fig. 1J: THREE MEMBER PEPTIDES WITH ASPARTIC ACID HEAD GROUP

SEQID No.	Peptide	Peptide sequence	Observation
24	Ac-ID ₃ (L)	Ac-IVD-COOH (L)	Hydrogelation

Fig 1

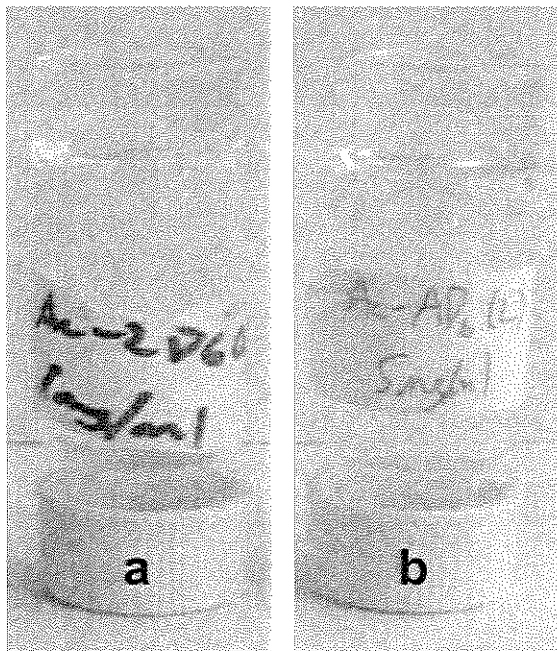


Fig. 2

a. Ac-LD-6 (L) 1mg/ml

b. Ac-AD-6 (L) 5mg/ml

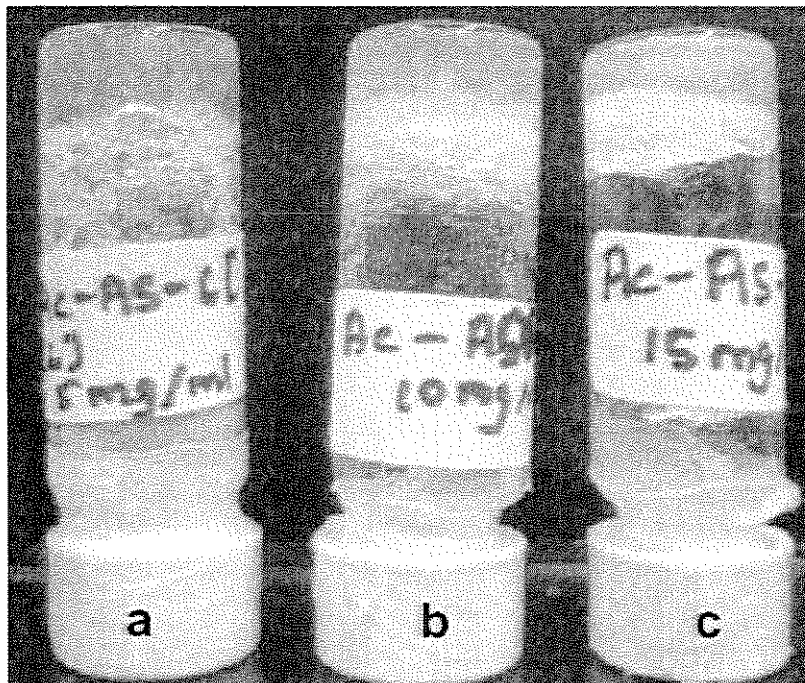


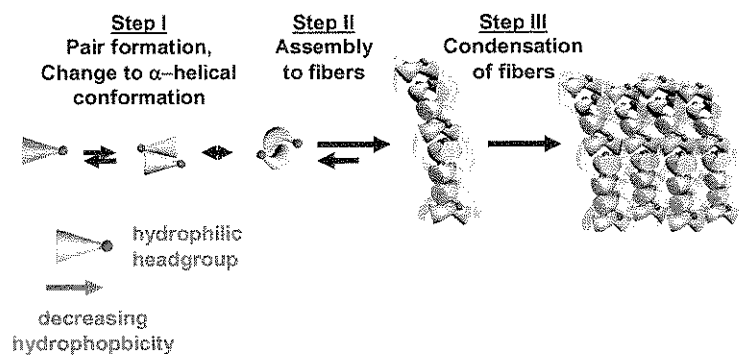
Fig. 3

a. Ac-AS-6 (L) 5mg/ml

b. Ac-AS-6 (L) 10mg/ml

c. Ac-AS-6 (L) 15mg/ml

Fig. 4



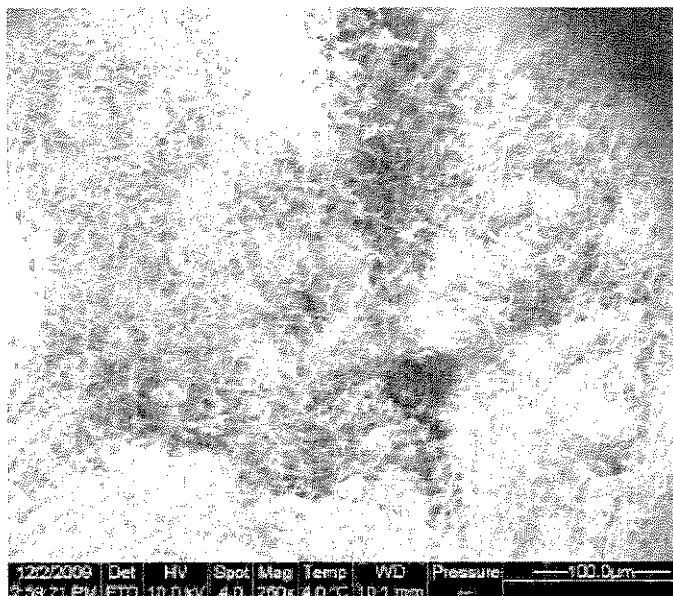


Fig. 5A

ESEM image of ACLD6 (L) gels at magnification of 260X at 4 °C.

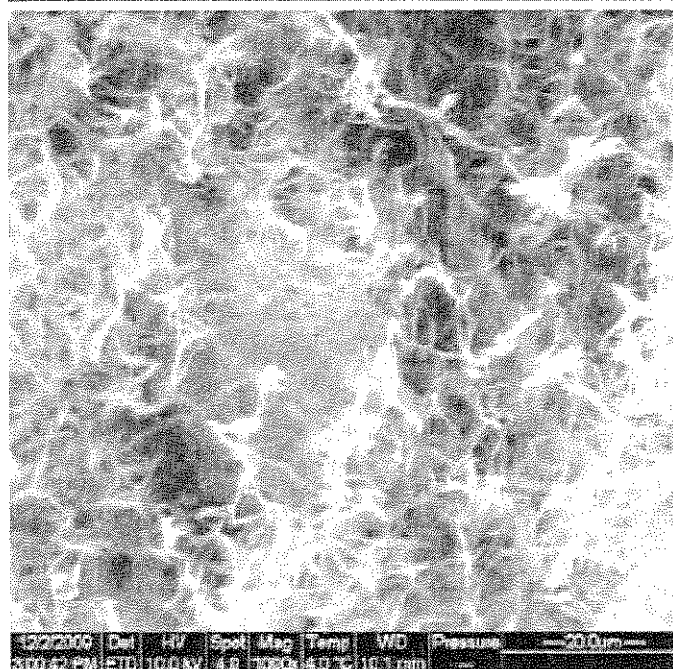


Fig. 5B

ESEM image of ACLD6 (L) gels at magnification of 1000X at 4 °C.

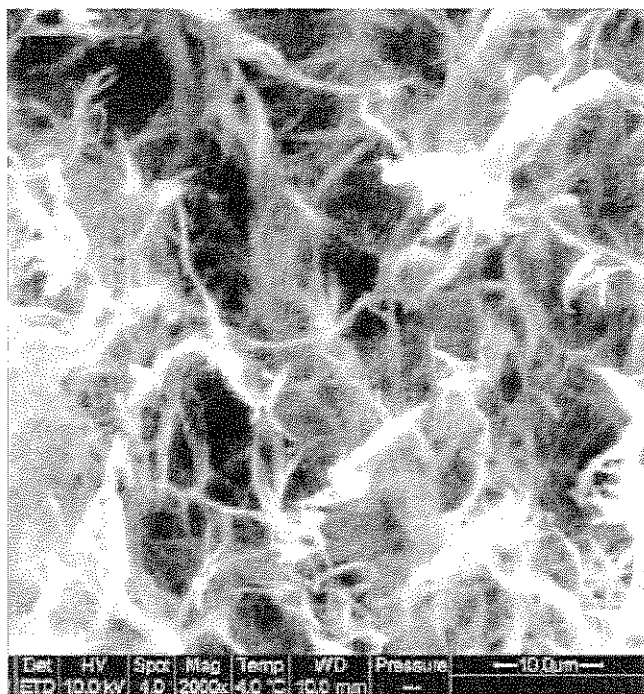


Fig. 5C

ESEM image of ACLD6 (L) gels at magnification of 2000X at 4 °C.

Fig. 6A

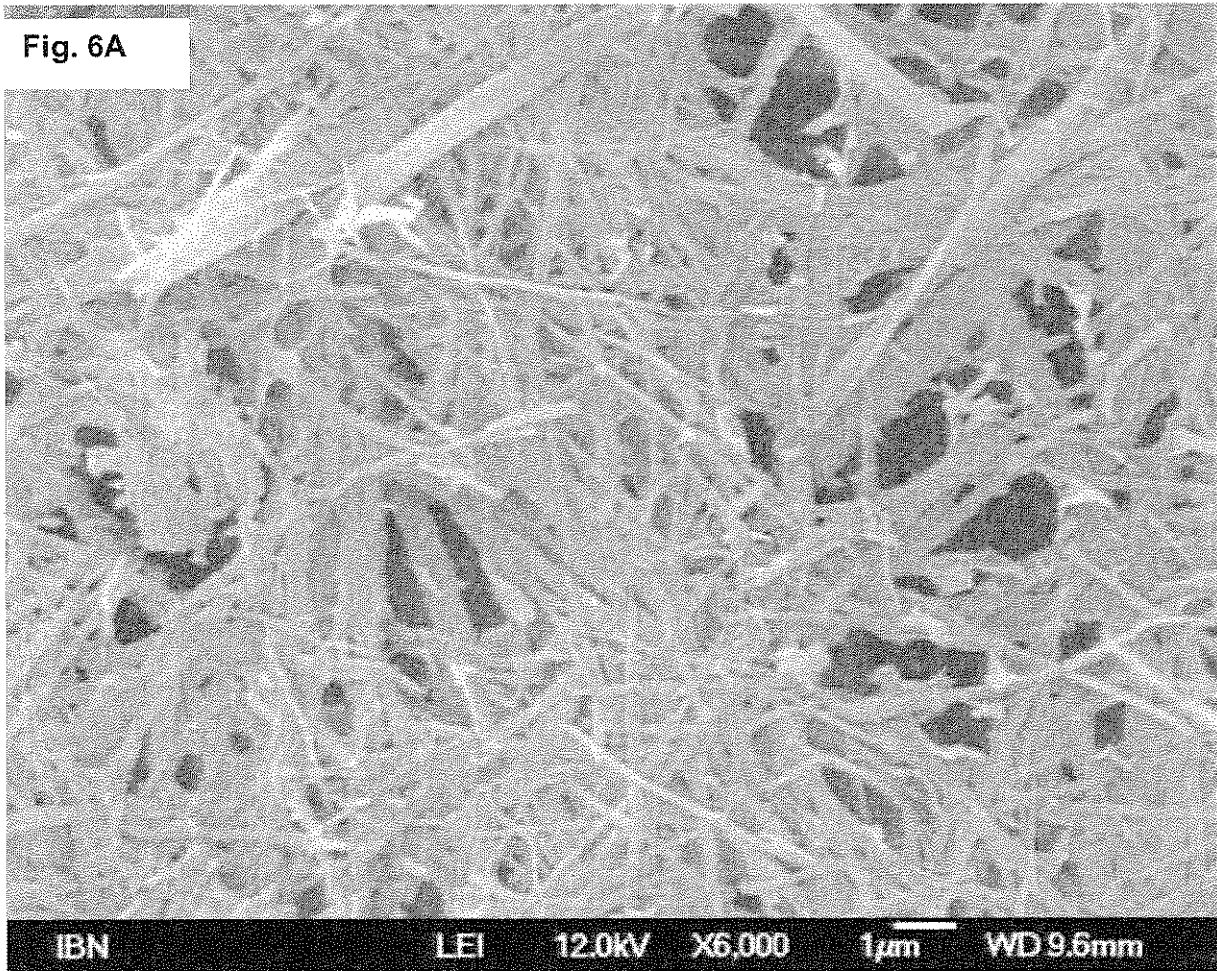


Fig. 6B

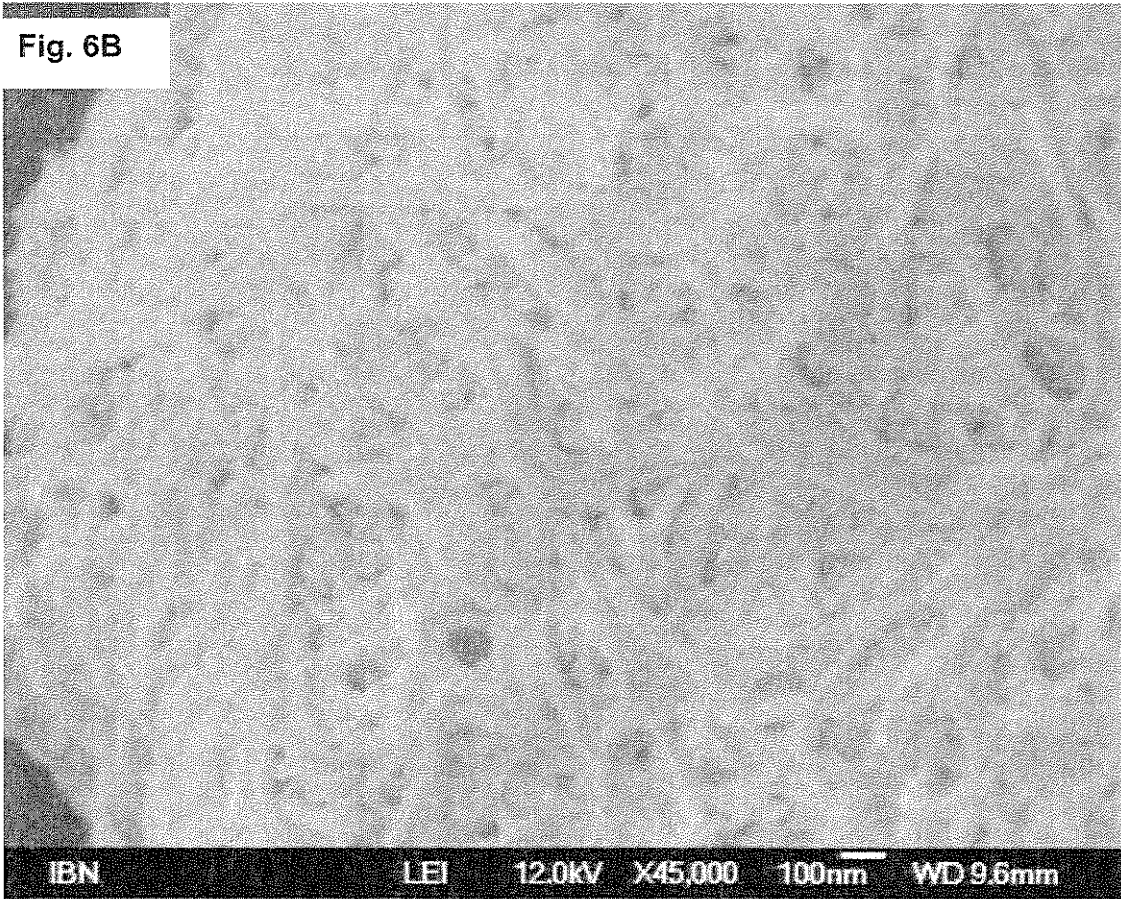
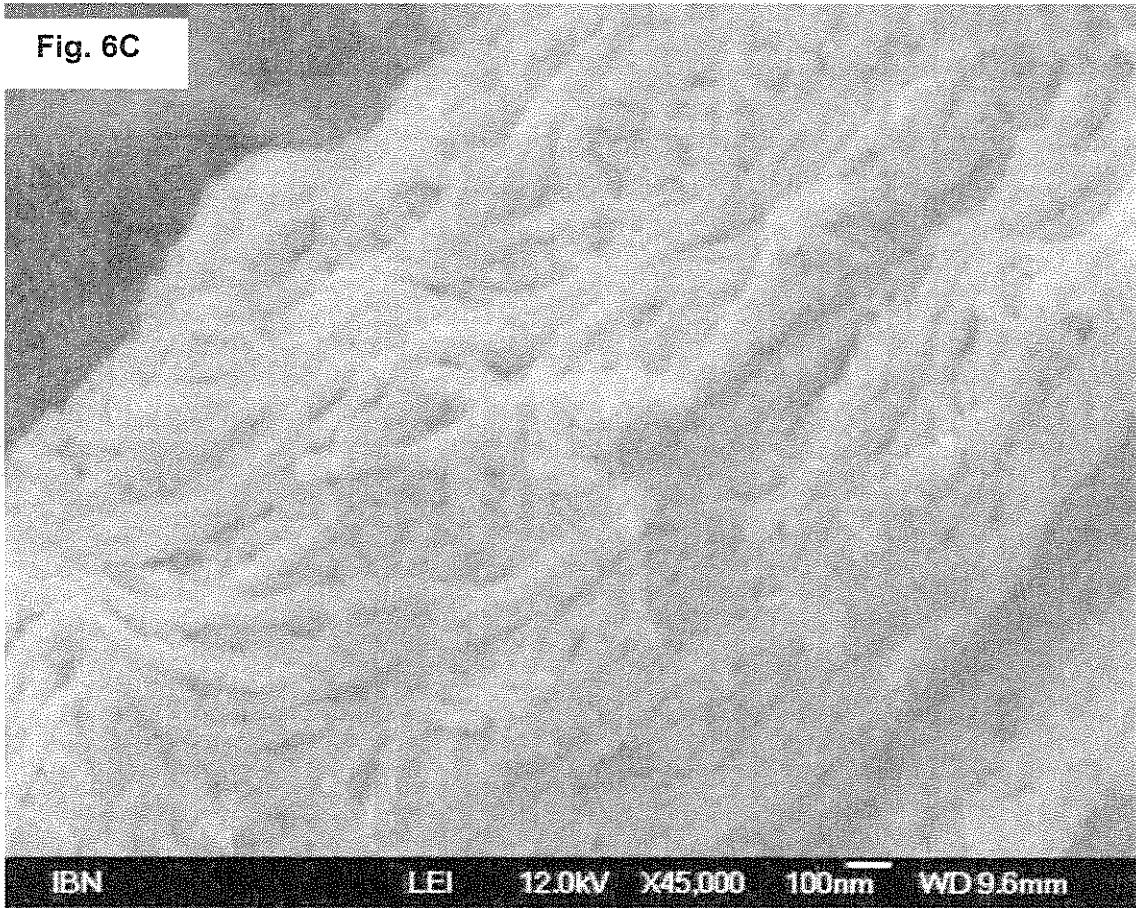


Fig. 6C



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Fig. 6D



Fig. 7A

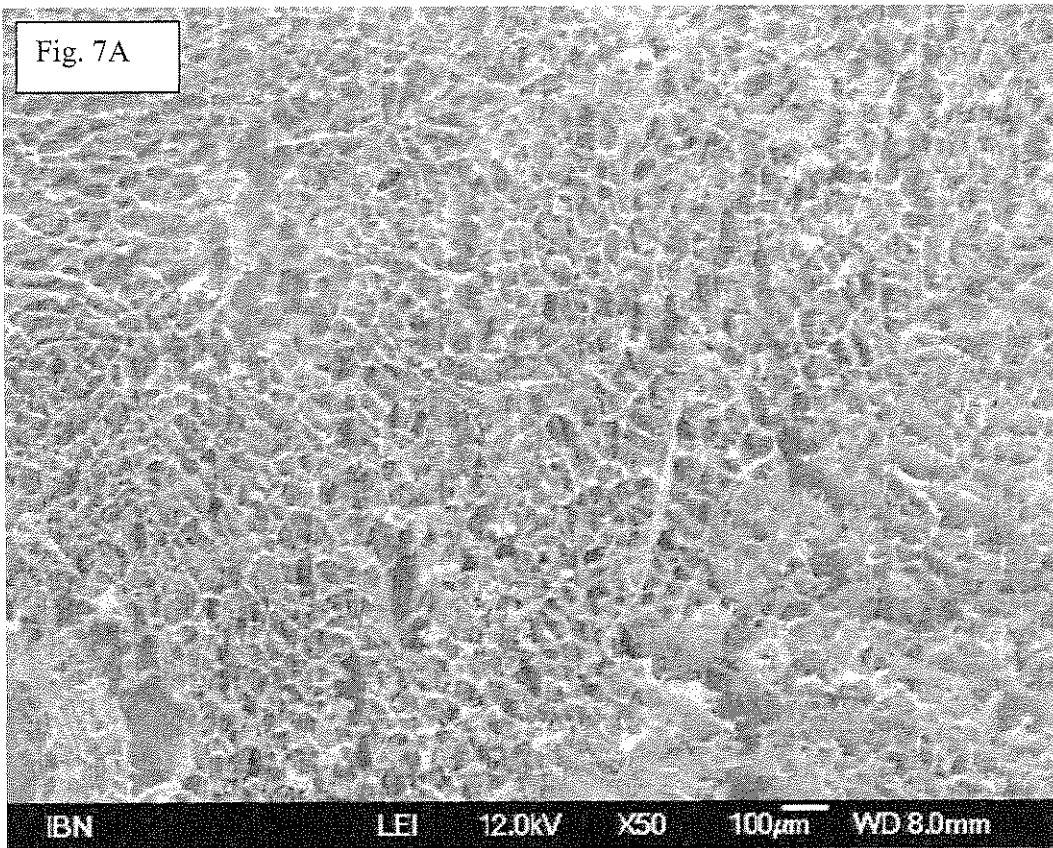


Fig. 7B

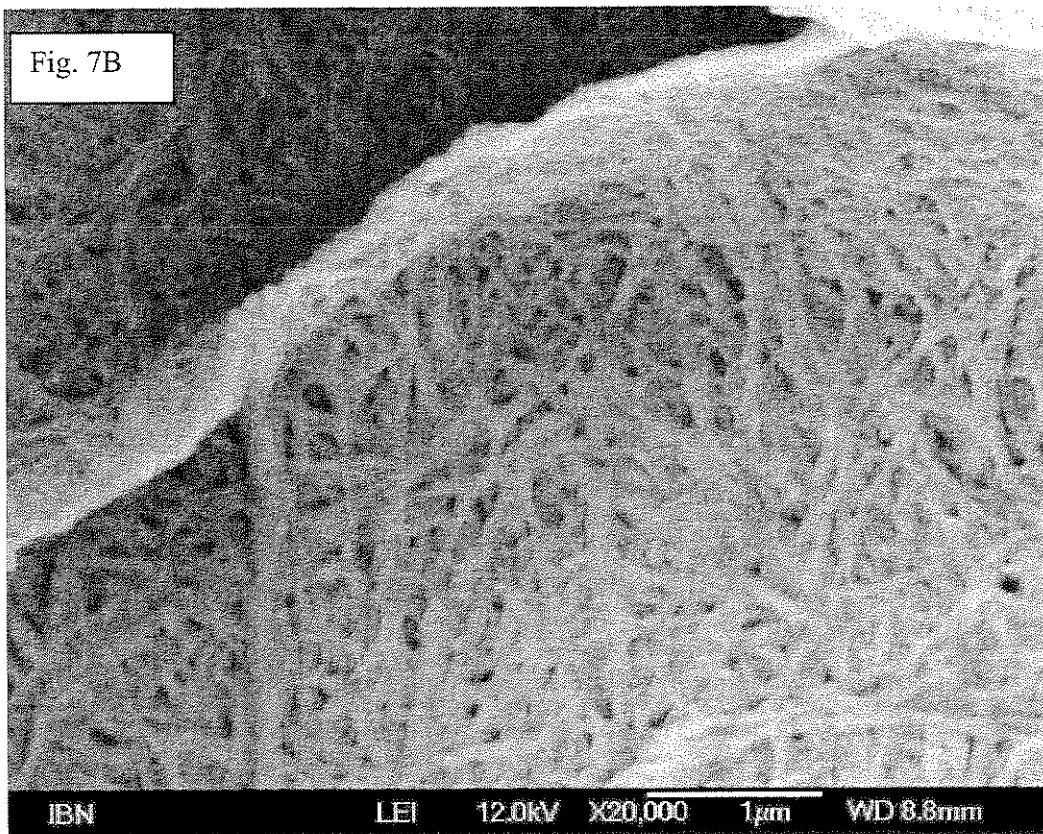


Fig. 8A

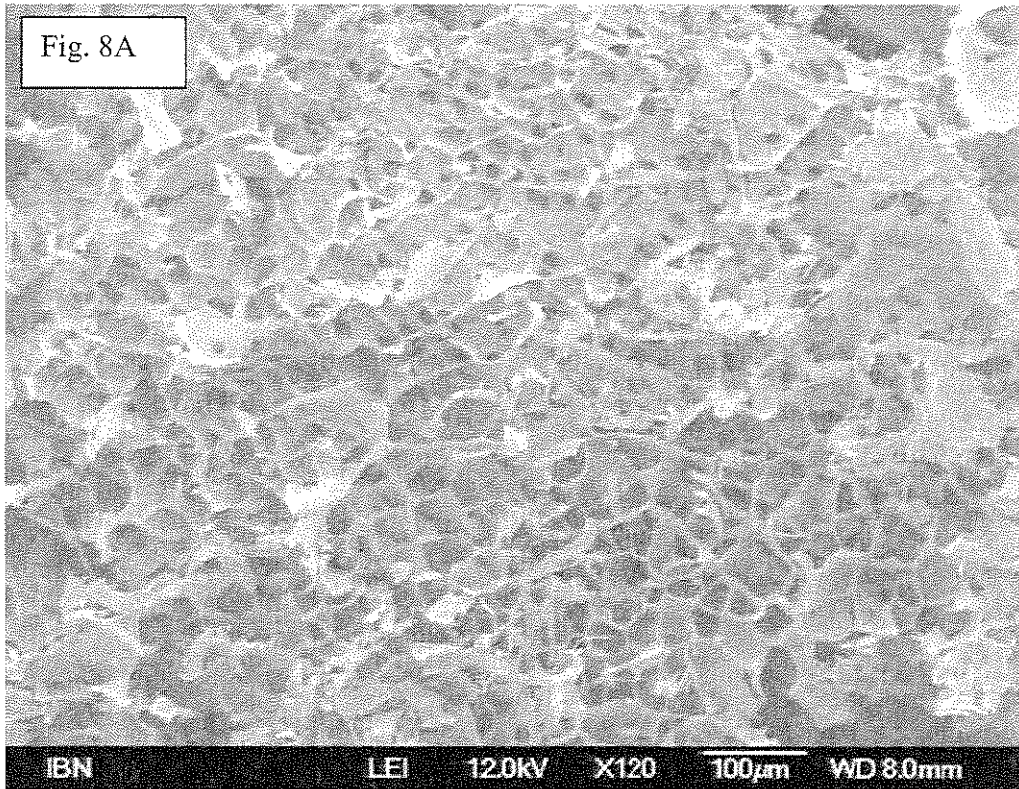
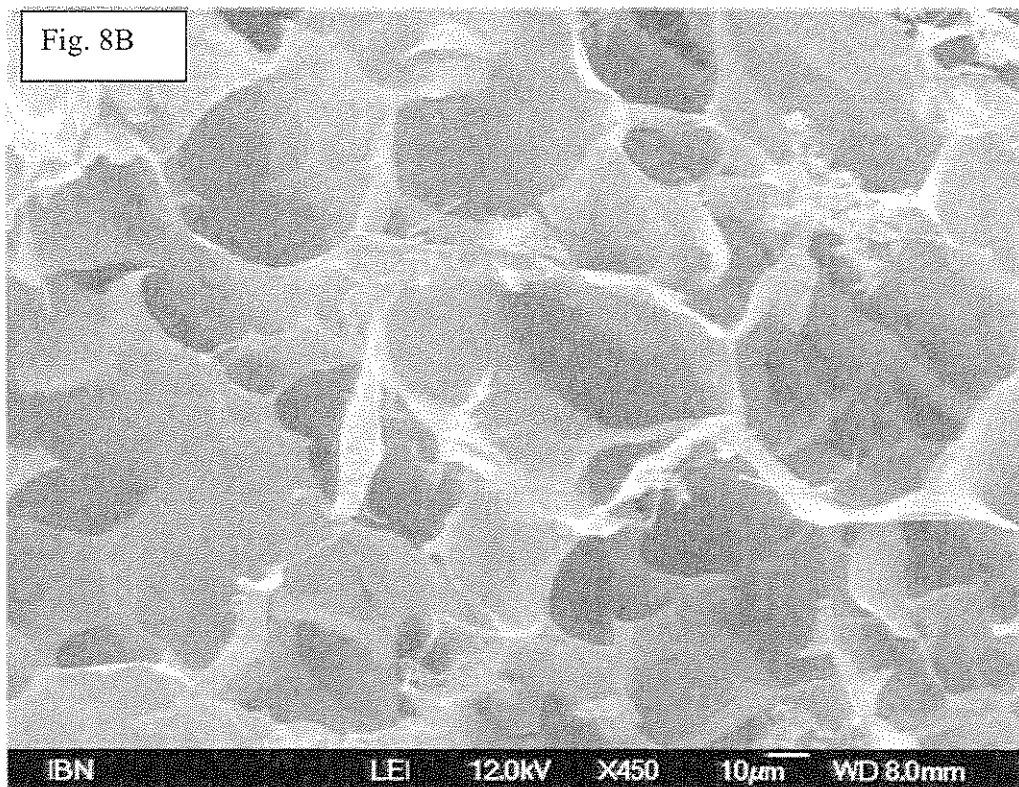


Fig. 8B



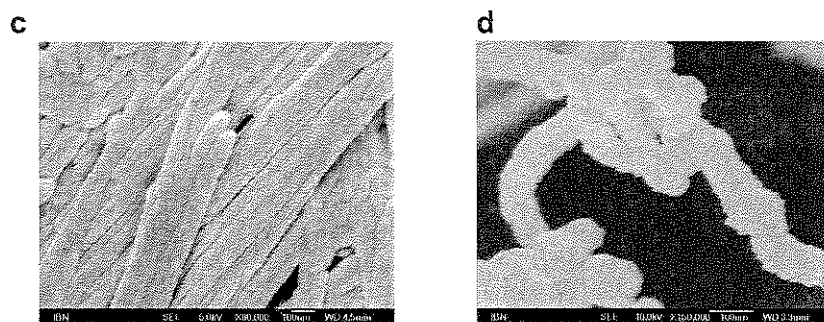


Fig. 9A

e

f

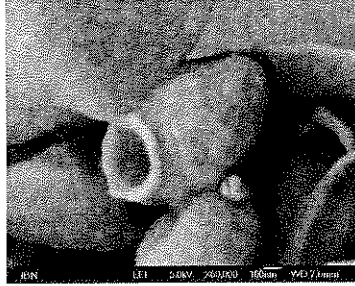
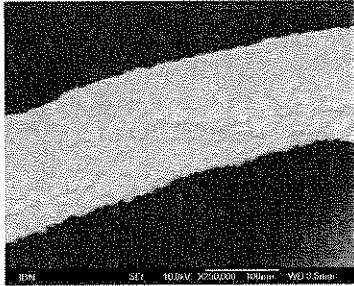


Fig. 9A

Fig. 9B

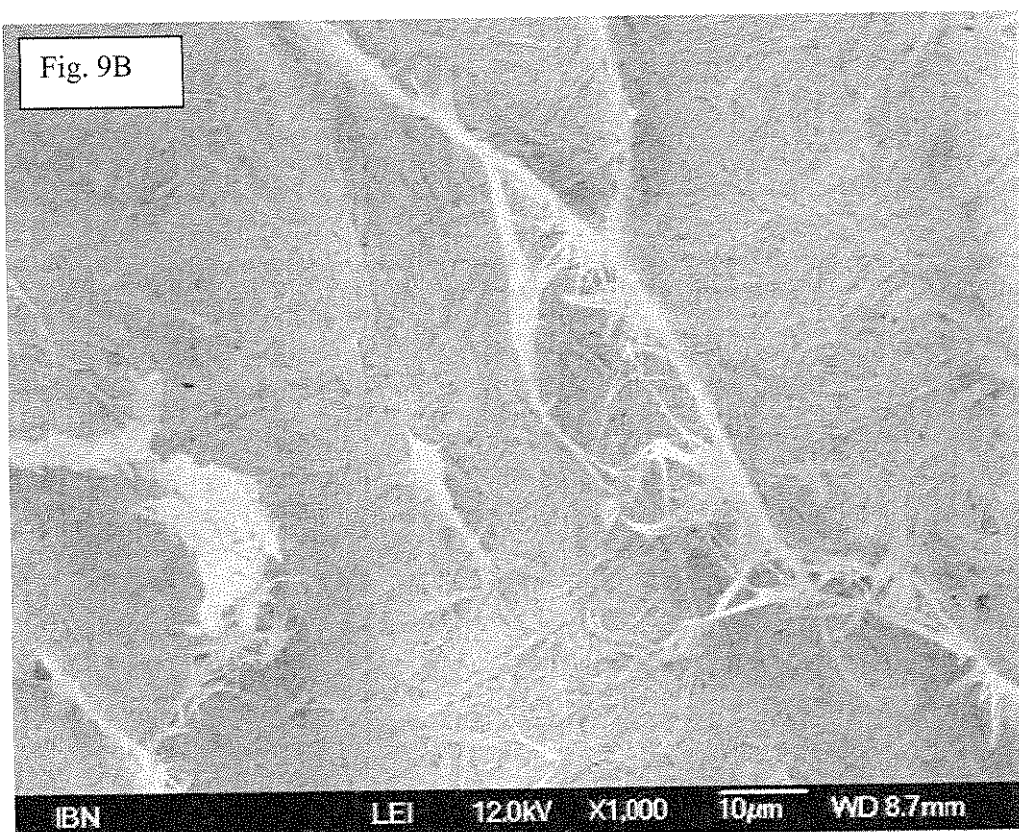


Fig. 9C

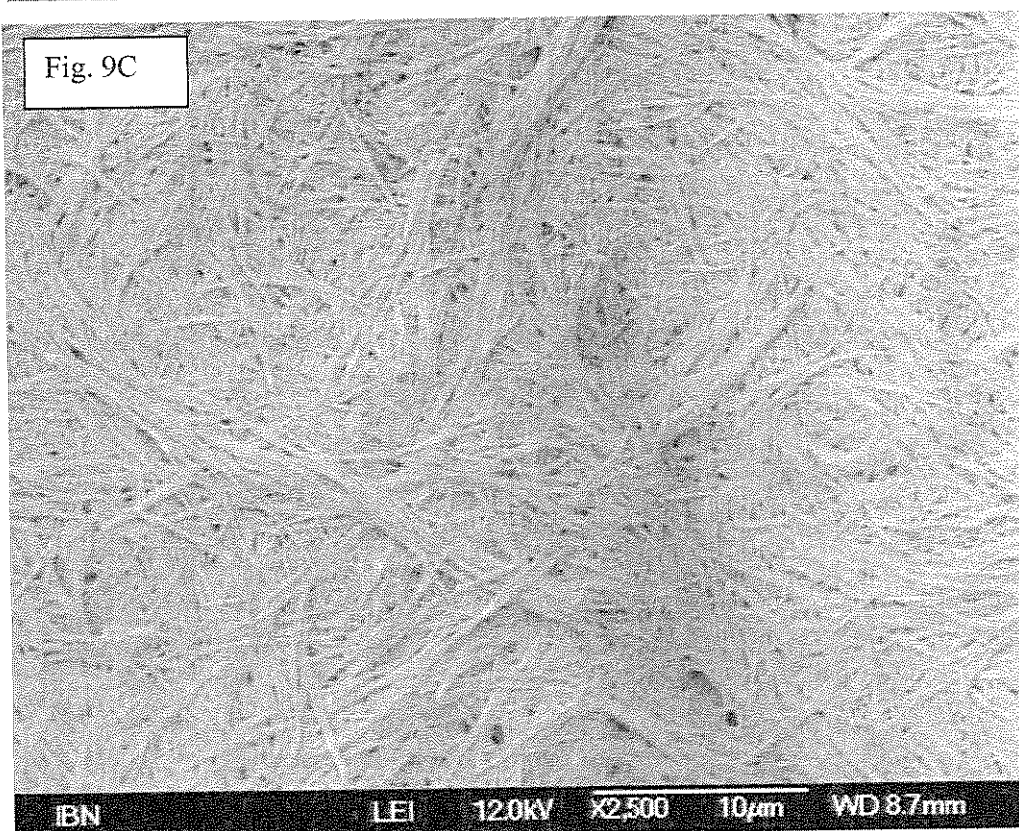


Fig. 9D

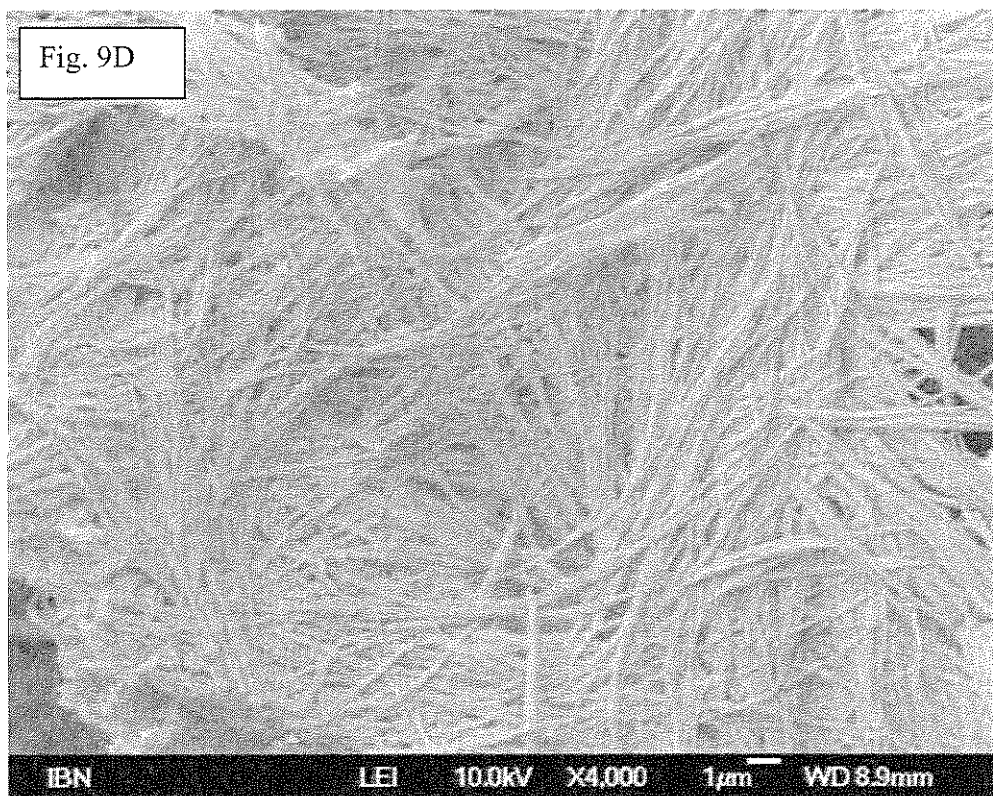
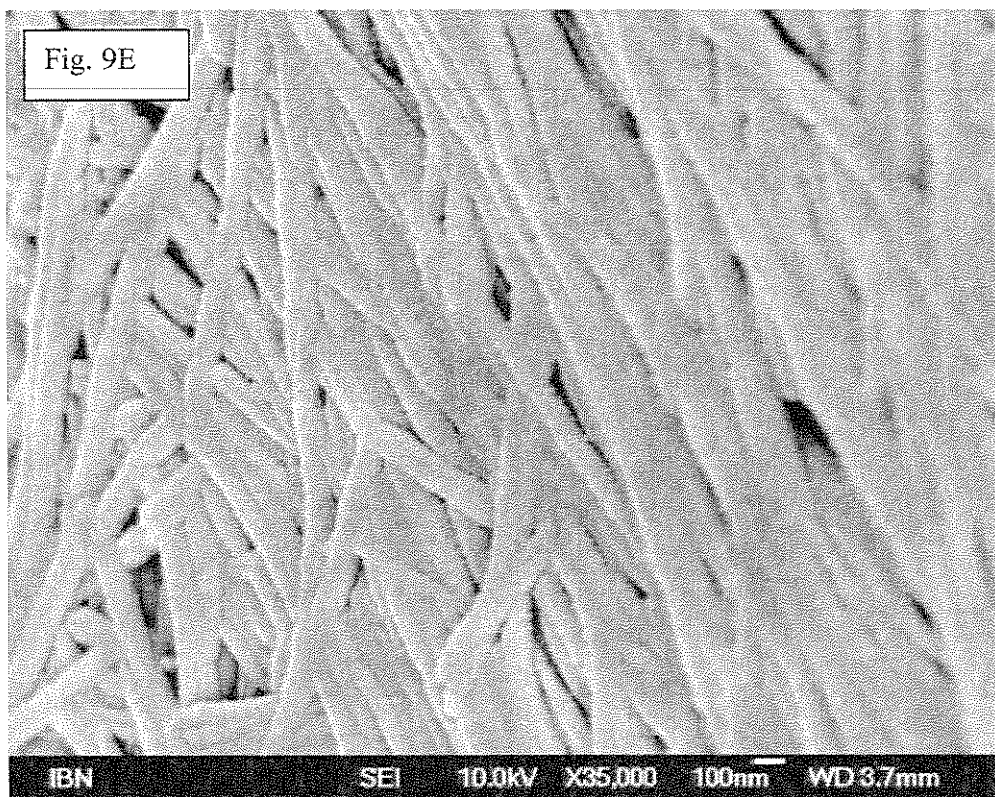


Fig. 9E



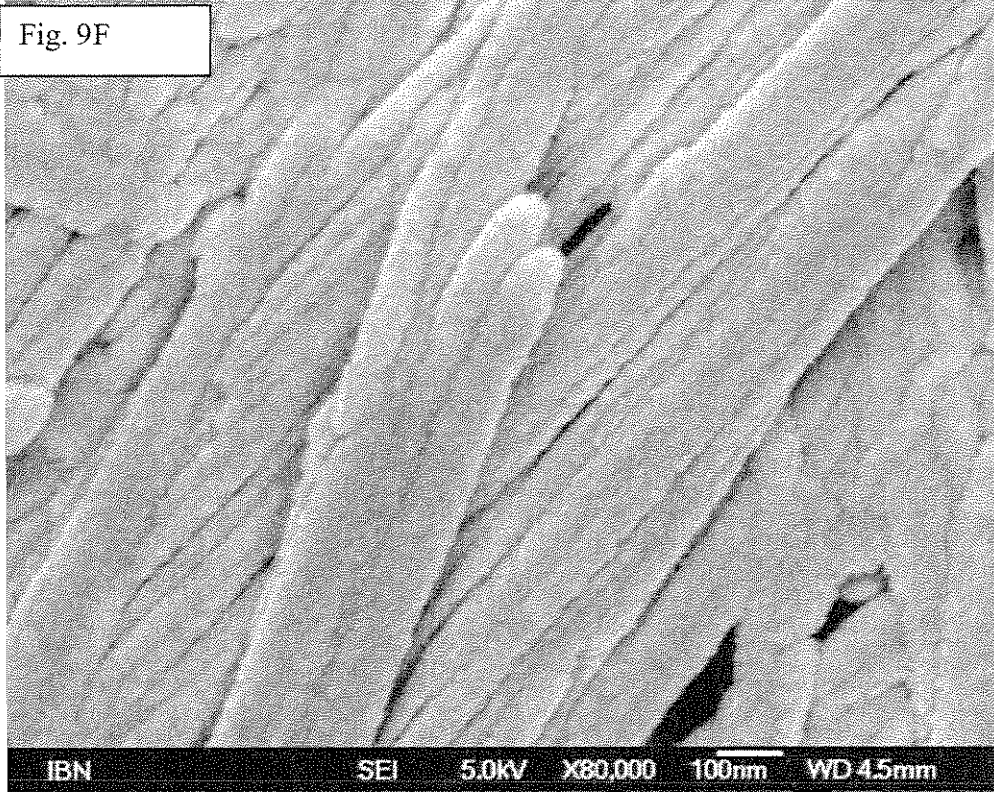


Fig. 9F

Fig. 9G

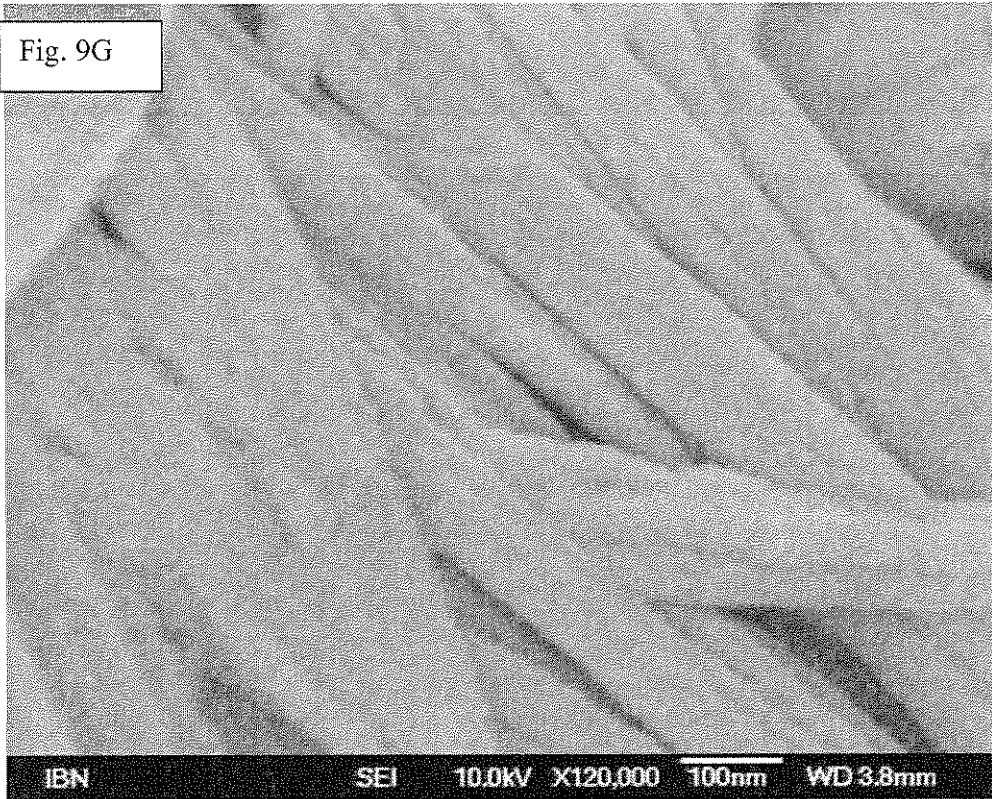
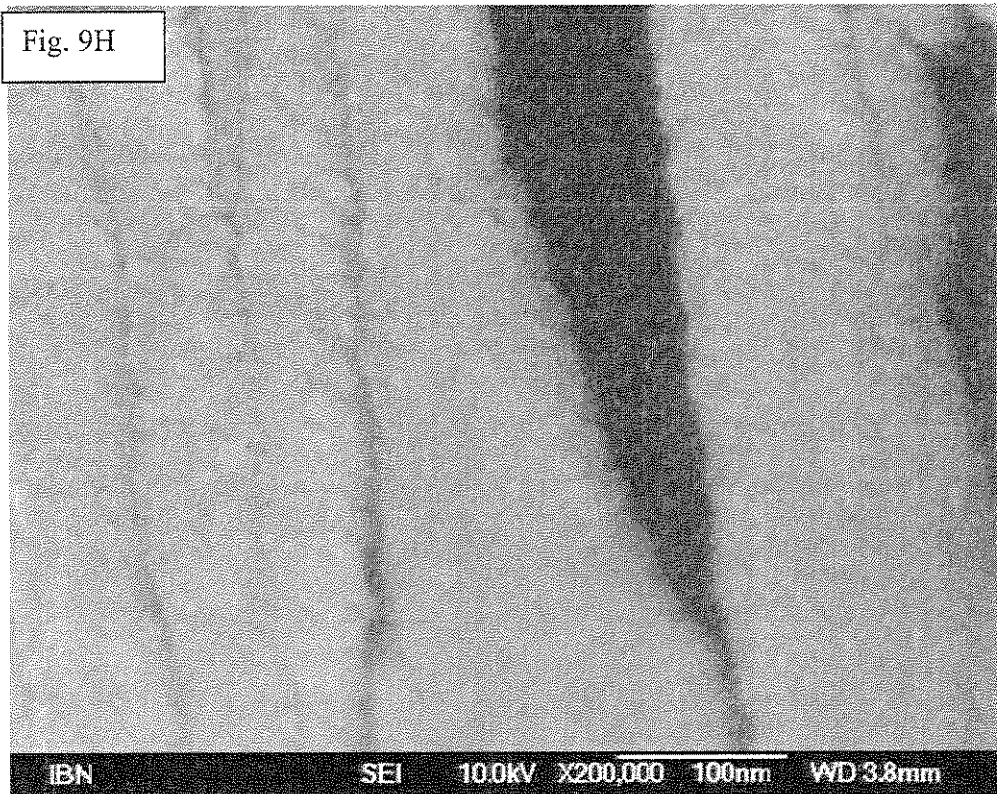


Fig. 9H



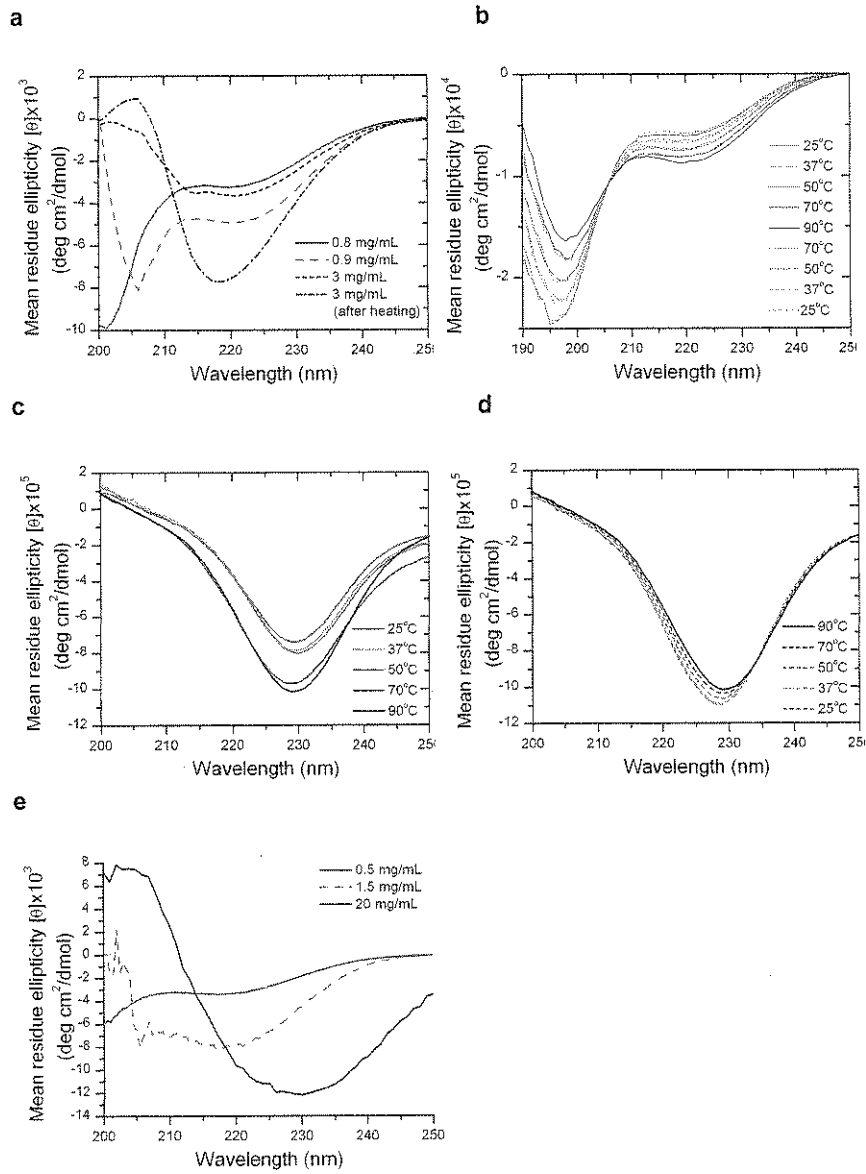


Fig. 10

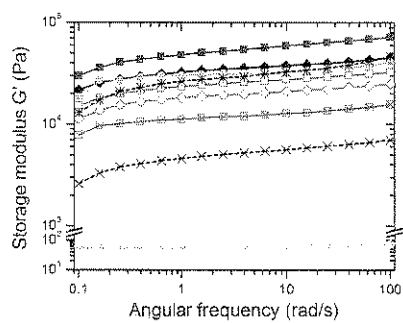
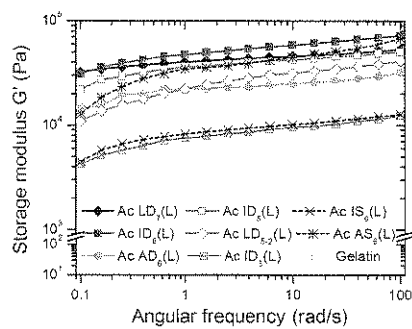
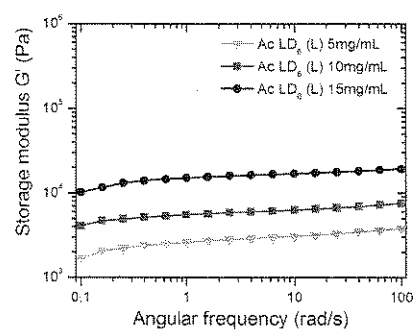
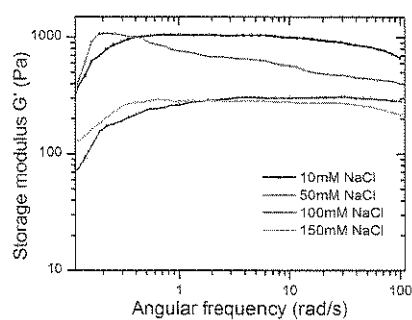
A**B****C****D****Fig. 11**

Fig. 12A

Overlay of amplitude sweep study of AcAD6 (L) 20mg/ml at 25° C and 50° C

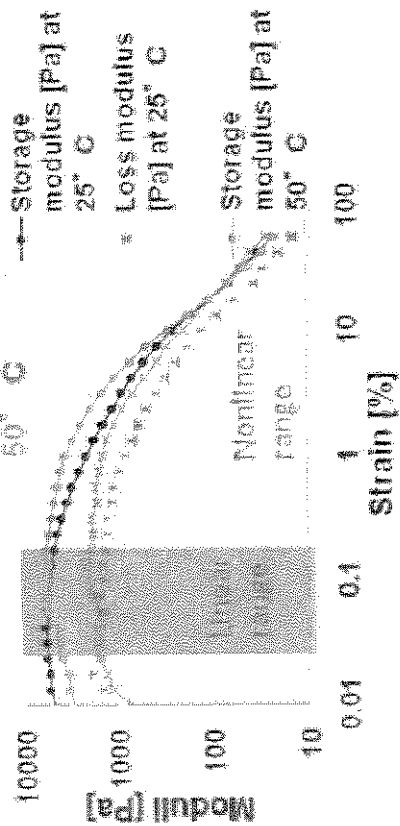


Fig. 12B

Overlay of amplitude sweep study of AcAD6 (D) 20mg/ml at 25° C and 50° C

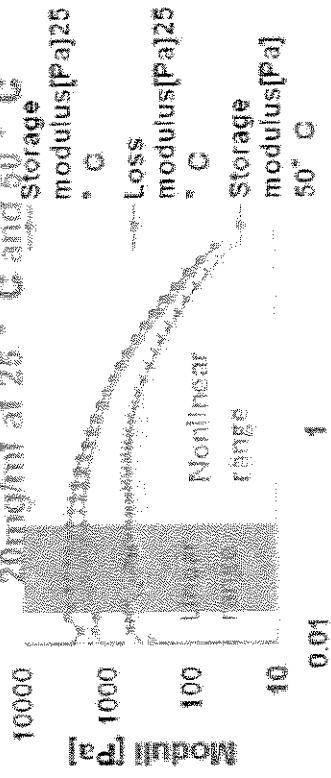


Fig. 12C

Overlay of frequency sweep study of AcAD6 (L) 20mg/ml with 0.1% strain at 25° C and 50° C

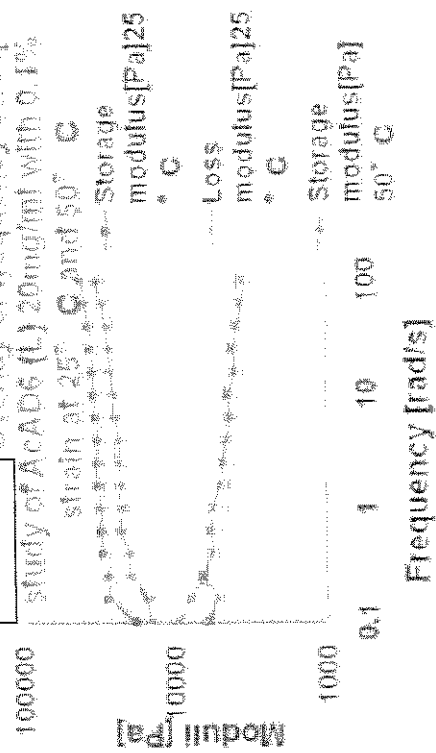
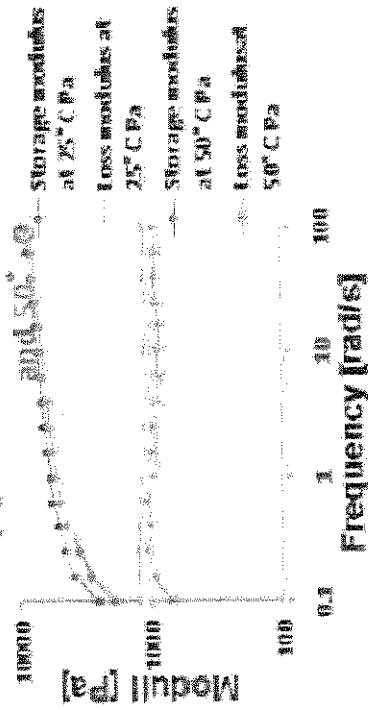
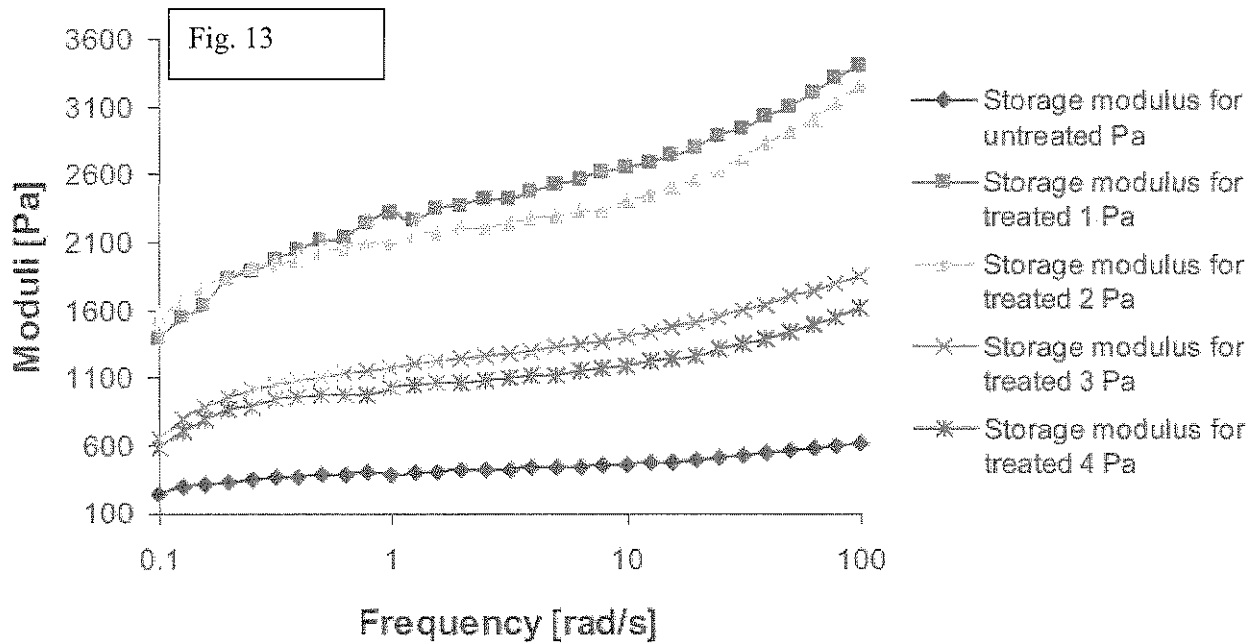


Fig. 12D

Overlay of frequency sweep study of AcAD6 (D) 20mg/ml with 0.1% strain at 25° C and 50° C





Gelatin concentration	Frequency [rad/s]	Storage Modulus [Pa]	Loss Modulus [Pa]
10 mg/ml	0.1	17.63	2.77
15 mg/ml		36.72	5.48
20 mg/ml		54.36	3.95
10 mg/ml	1	20.87	0.80
15 mg/ml		50.68	5.93
20 mg/ml		57.00	6.95
10 mg/ml	10	21.90	0.86
15 mg/ml		74.35	-15.48
20 mg/ml		62.63	-7.27
10 mg/ml	100	21.68	3.83
15 mg/ml		56.35	8.74
20 mg/ml		73.80	10.60

Fig. 14

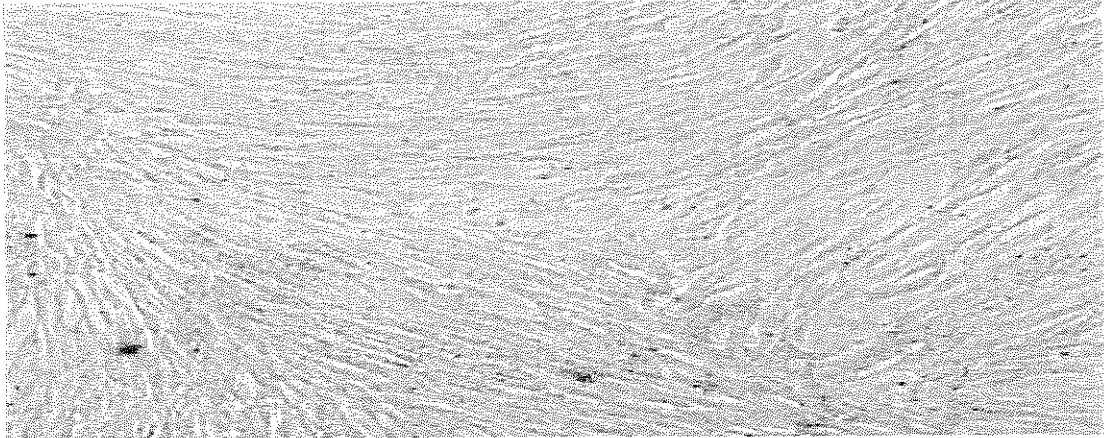


Fig.15A

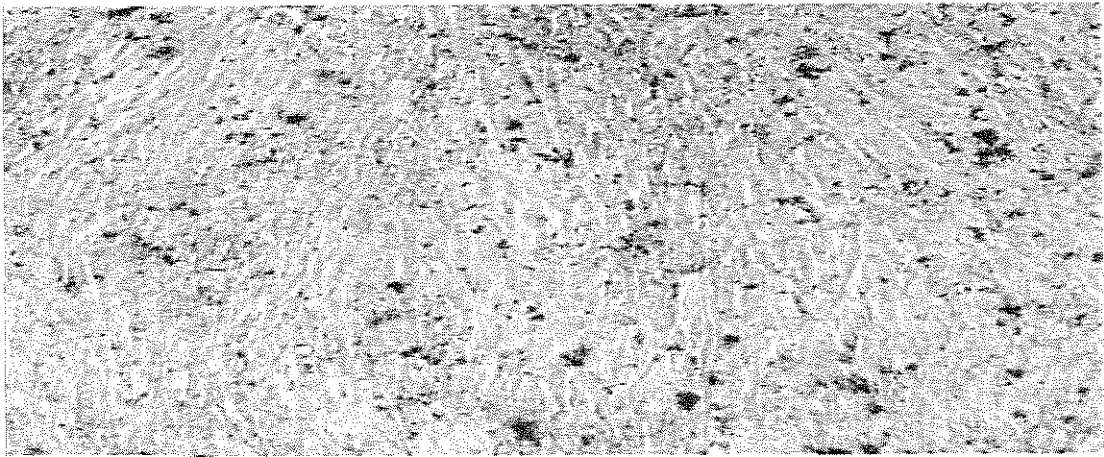


Fig. 15B

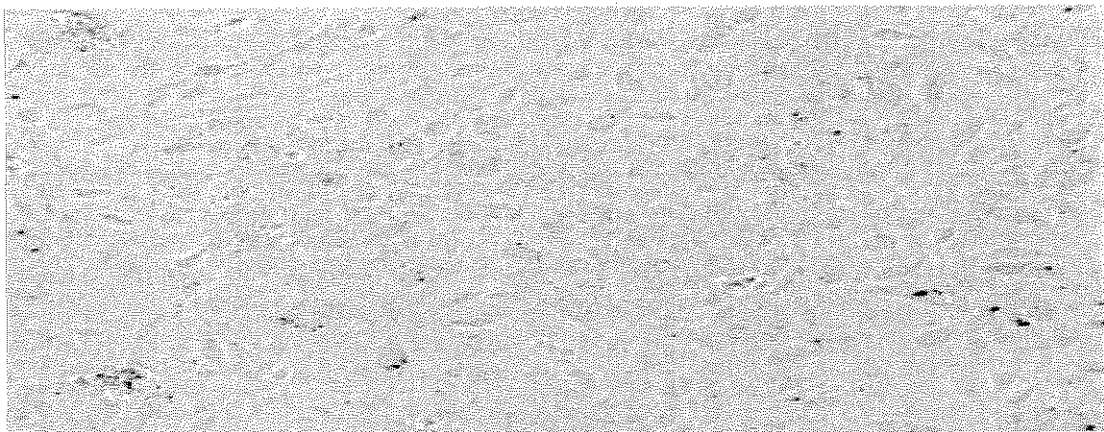


Fig. 15C

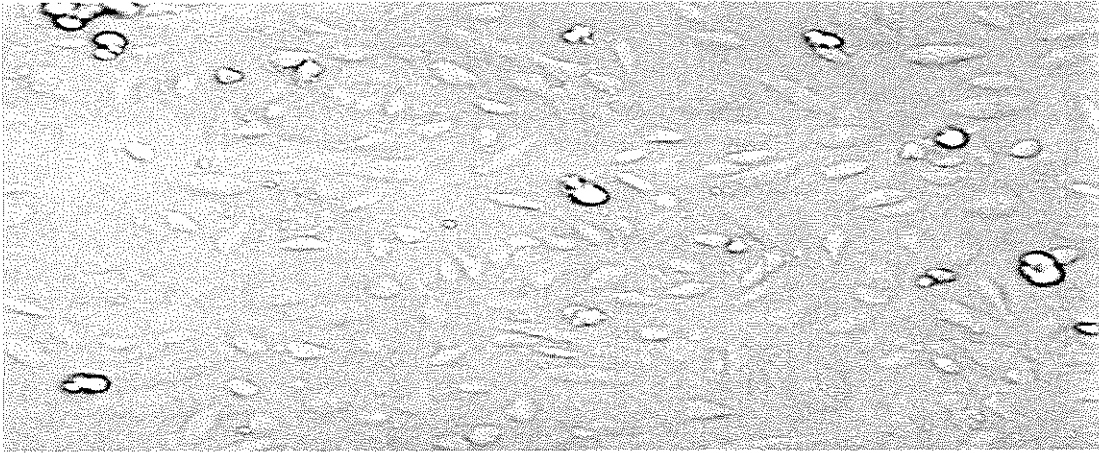


Fig. 15D

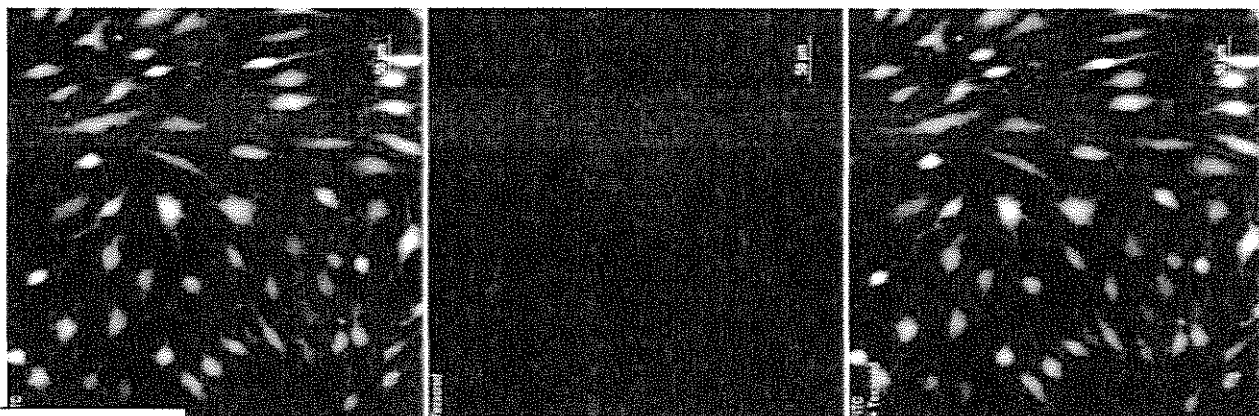


Fig. 16A

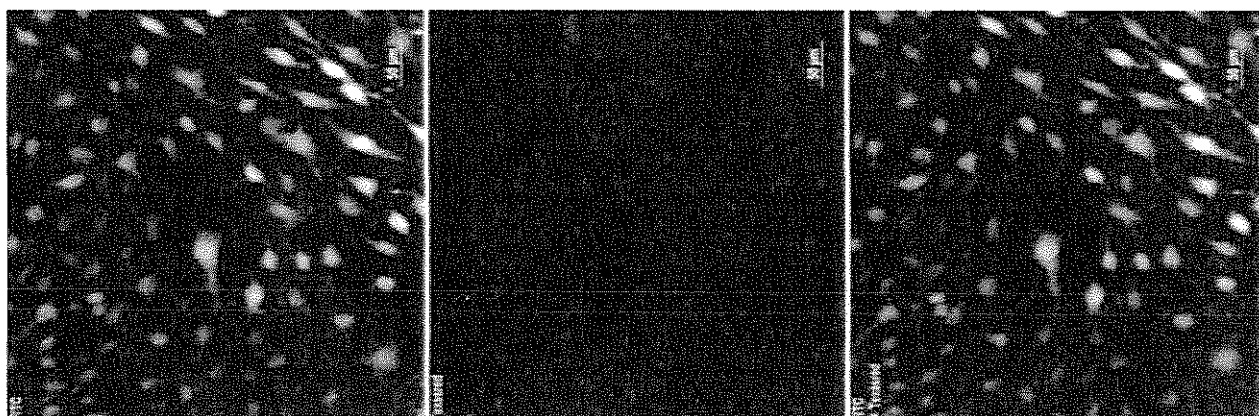


Fig. 16B