

## Références

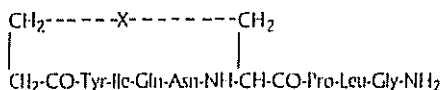
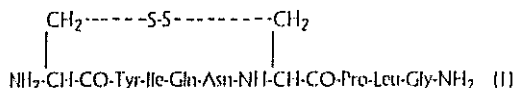
1. S. DELLA-NEGRA, J. DEPALIW, H. JORET, Y. LE BEYEC. *Journal de Physique*, C2, T50 (1989), 63.
- S. DELLA-NEGRA, J. DEPALIW, H. JORET, Y. LE BEYEC. *Communication*, 7<sup>e</sup> Congrès SFSM, Rennes, sept. 1989.
2. L. MA, F. FOURNIER, J.C. TABET, C. SALLES, J.C. JALLEGEAS. *Communications*, 7<sup>e</sup> Congrès SFSM, Rennes, sept. 1989.
- R.B. COLE, J.C. TABET, C. SALLES, J.C. JALLEGEAS, J. CROUZET. *Rapid. Com. in Mass. Spectr.* 33 (1989), 59.
3. S. DELLA-NEGRA, Y. LE BEYEC. *Anal. Chem.* 57 (1985), 2035.
4. A. BRUNELLE, S. DELLA-NEGRA, J. DEPALIW, H. JORET, Y. LE BEYEC. *Ions from Organic Solids IFOS V* (1990) 39. John Wiley and Sons, edited by A. HEDIN, B.U.R. SLINDQVIST, A. BENNINGHOVEN.
- A. BRUNELLE, Thèse Université Paris-Sud, sept. 1990.

## Daughter ion mass spectra of oxytocin derivatives with modified disulfide bonds

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A series of eight oxytocin derivatives has been studied: oxytocin (1), deaminooxytocin (2), deamino-1-carboxytocin (3), deamino-6-carboxytocin (4), deamino-1,6-dicarboxytocin (5), sulfoxide of deamino-1-carboxytocin (6), sulfone of deamino-1-carboxytocin (7), and 6,1-x-aminopimelic acid oxytocin — see Scheme.



X = -S-S- (2), -CH<sub>2</sub>-S- (3), -S-CH<sub>2</sub>- (4), -CH<sub>2</sub>-CH<sub>2</sub>- (5),  
-CH<sub>2</sub>-SO- (6), -CH<sub>2</sub>SO<sub>2</sub>- (7), -CH<sub>2</sub>- (8)

### Scheme

Mass spectra have been obtained on a ZAB-EQ mass spectrometer (VG Analytical Ltd., Manchester, UK) supplied with 35 kV caesium ion gun. B/E linked scan technique with collision activation in IFFR was used. Collision gas was helium, pressure in the collision cell responses to 50 % transmission of molecular ion of oxytocin (1). Matrix was glycerol with 5 % of heptafluorobutyric acid.

The daughter ion mass spectra of the series studied show the same basic features as follows: the aminoterminals fragments are dominating with the most abundant B<sub>6</sub>, B<sub>7</sub>, B<sub>8</sub>, and B<sub>9</sub> fragments corresponding to the cleavage of peptide bonds in the chain outside the ring.